



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365Merv
MEW/1/4

#27024

Janice the same site
Is this the same site
as Fairburn Road Chattahoochee
GAD 984 245146? If it is
make sure it gets to
the file. MV

REC'D 6-4-1993

Ms. Jennifer Kaduck
Georgia Environmental Protection Division
Department of Natural Resources
205 Butler Street
Suite 1154 - East Tower
Atlanta, Georgia 30334

RE: Fairburn Road Landfill, Douglasville, Georgia

Dear: Ms. Kaduck

If not find out what it is.

The U.S. Environmental Protection Agency's Emergency Response and Removal Branch (ERRB) reviewed the available information for the above referenced site to determine its eligibility for a potential removal action under the National Contingency Plan (NCP). The site information was evaluated using criteria from Section 300.415 of the NCP and current ERRB program guidance.

Based upon ERRB's review, the above site does not meet the criteria for removal eligibility. This determination does not preclude any other investigation activities or response actions by other parties which may still be appropriate for this site. Should site conditions change or additional information become available, ERRB will re-evaluate this site as necessary.

Should you have any questions concerning ERRB's determination, please contact Mr. Shane Hitchcock, Chief of Removal Operations Section, at (404) 347-3931 extension 6122.

Sincerely,

Myron
Emergency

cc:

(b) (6) - Personal Privacy

RAT

NFA - Low

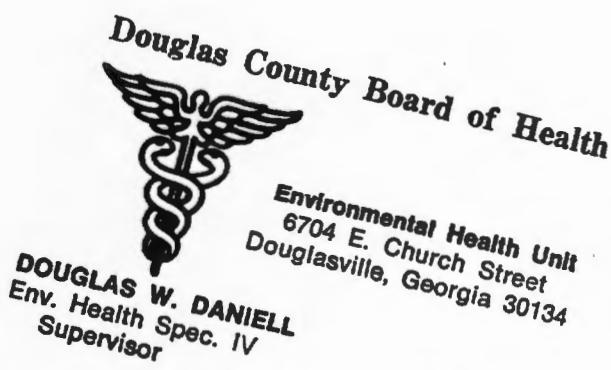
GA FAIRBURN RD LANDFILL
DOUGLASVILLE.

State - lead

Fairburn Rd Landfill
Douglas County

Landowner - Bartlett Hinsley

Elizabeth Teal knows additional information
(Pig farmer)



(Bart Reedy knows this person)
Female

County Code enforcement agent was witness
to State of Georgia sampling.

State Sampler unknown.

PRELIMINARY ASSESSMENT

FAIRBURN ROAD DUMP

**FAIRBURN ROAD
DOUGLASSVILLE, DOUGLAS COUNTY, GEORGIA
EPA ID NUMBER GAD984295196**

PREPARED FOR US EPA REGION IV

BY

**GEORGIA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION
HAZARDOUS WASTE MANAGEMENT BRANCH**

March 31, 1993

Prepared by:

**Billy Hendricks
Environmental Specialist
Hazardous Waste Management Branch**

Preliminary Assessment

Fairburn Road Dump
Fairburn Road
Douglasville, Douglas County, Georgia

1.0 INTRODUCTION

Under authority of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA), the US EPA Region IV Waste Management Division has authorized the Georgia Department of Natural Resources, Environmental Protection Division (EPD) to conduct a Preliminary Assessment (PA) at the Fairburn Road Dump site in Douglasville, Douglas County, Georgia. The purpose of the investigation was to collect information concerning conditions at the Fairburn Road Dump site sufficient to assess the threat posed to human health and the environment and to determine the need for additional investigation under CERCLA/SARA or other action. The scope of the investigation included review of available file information, a comprehensive target search, a review of on-site and off-site reconnaissance field notes, and ranking of this site for hazard.

2.0 SITE DESCRIPTION, OPERATIONAL HISTORY, AND WASTE CHARACTERISTICS

2.1 Location

The Fairburn Road Dump site is located approximately 8.5 miles east of Douglasville on Fairburn Road, Georgia Highway 166, as shown on Figure 1. The site is bordered to the south by Fairburn Road, to the east by the Chattahoochee River, to the north by mixed residential-commercial property and the Douglasville/ Douglas County Water and Sewer Authority Water Treatment Plant, and to the west by King Road.

2.2 Site Description

The Fairburn Road Dump site occupies approximately 79 acres on the west bank of the Chattahoochee River. A substantial portion of the property is comprised of flood plain along a meander of the river. Analysis of aerial photographs of the site, performed by the U. S. EPA's Environmental Monitoring Systems Laboratory, EMSL, discloses a collection of structures and other improvements, as well as a rough chronology of possible disposal activities. Black and white, and color infrared, photographs covering the period from 1968 to 1990 were catalogued and interpreted by the Environmental Photographic Interpretation Center (EPIC), a branch of EMSL.

Inspection of the site was performed February 24, 1993 following searches of Douglas County title and tax records. The site was originally intended as a subdivision, Riverside Gardens. The parcel comprises 95 separate lots, ranging in size from $\frac{1}{4}$

acre to over 2½ acres. Of these 95 lots, approximately 75 are included in the study area. More than fifty owners are currently recorded for these lots, some of which have been recombined to form larger lots.

The site is moderately developed, with numerous permanent improvements, including houses, warehouse/office structures, open storage areas, and trailers in abundance. The majority of the site remains wooded. In addition to the dozens of residences on the site, major tenants include:

Poor Folks Auto Salvage, an auto wrecking and parts company
The Diesel Doctor, a heavy truck repair company
Oxford's Grocery, a convenience store
Thames Antiques, an antique dealer
Douglasville Sheet Metal, a sheet metal and HVAC sales and service company
Anders Welding and Sand, a machine shop and dredging company
Garrett Sand and Gravel, a dredging company
D & M Auto, an automobile repair shop

Of the approximately 2400 feet of riverbank occupied by the property, three areas comprising about 800 feet have been cleared. Some of this cleared area appears to have been used in dredging operations for sand and gravel as far back as the first set of aerial photographs in 1968. As recently as 1990, new stretches of the bank were cleared for dredging access.

2.3 Operational History and Waste Characteristics

The Fairburn Road Dump Site was "discovered" June 21, 1991 based on a complaint filed with the U. S. EPA Region IV. According to EPA documents, Ms. Elizabeth Teal of Douglasville claims to have witnessed dumping at the site by [Mr. Bartlett Hulsey]. This claim is substantiated by similar claims by other county residents including [Ms. Pamela Blockey O'Brien]. They indicated that at least some of the waste originated from Young Refinery in Douglasville. As a result of these events, the site was issued EPA Identification Number GAD984295196.

Based on file review and the site visit, the site has not been operated as a disposal facility. That portion of the site used as a junkyard is the only currently visible source of contaminants: possible substances of concern include used motor oil, antifreeze, fuel, and bearing metals. Evidence of previous waste disposal at the site is limited to reports filed with USEPA Region IV by residents of the area. However, it must be noted that conversations with the original complainant indicate that the Fairburn Road Dump Site is not the location she intended in her complaint.

Routine operations of any land-disturbing activities are limited to dredging the Chattahoochee for sand and gravel. There are currently two active and one inactive dredging operations. Garrett Sand and Gravel operates the northernmost site under Georgia Land Use Permit Number 405-87. Anders Welding and Sand operates the

southernmost site; no land use permit is known to exist. The central site is located on property [owned by Farris Richardson] and shows some evidence of current dredge operations. At the time of the site visit, the Richardson dredge operation had apparently been at least temporarily closed down; the dredge barge, comprised of eight 1000 gallon steel tanks connected by steel beams, was on stands on shore.

3.0 GROUNDWATER PATHWAY

3.1 Hydrogeologic Setting

The Fairburn Road Dump Site is located along the Brevard fault between the Northern and Southern Piedmont Physiographic Provinces adjacent to the Chattahoochee River. Soils at the site are of alluvial fill composed almost exclusively of sand in the flood plain, and clay silt elsewhere. The site is located atop the Brevard fault, a zone of substantial cataclasis. Thus, subsoil and underlying rock are of greatly heterogeneous size and composition. Wells into bedrock in the area have the potential to produce large amounts of water from the voids formed by the massive fracture zone. Due to the site's proximity to the river and the porous nature of the soil, most contaminants released or disposed in the flood plain at the site would migrate directly to the river.

The soils at the most likely source of contaminants, Poor Folks Auto Salvage, are clay with fairly low permeability. Approximately ten per cent of the surface area of that operation has been paved, resulting in even lower permeability. It is unlikely that a major release to groundwater has occurred; the potential for a release does exist.

3.2 Groundwater Targets

With no record of any soil borings on site, or in the immediate area, the exact geology underlying the site is unknown. The geology of the region that the site is in suggests that the subsurface, and consequently, infiltration rate, are variable; this is supported by physical inspection during the site visit. CENTRACTS data indicate some use of private wells for drinking water on the site: three wells are shown within 0.25 mile, and an additional eight wells between 0.25 and 0.5 mile from the center of the site. However, as the subsurface at the site is predominantly clay silt and gravel, migration is in places rapid and direct to the river. No samples are known to have been taken of the water provided by any of the wells.

3.3 Groundwater Conclusions

All of the residents of the site have county water available. The Douglasville/Douglas County Water and Sewer Authority shows active records of service for all of the lots along Riverside Drive. As no gardens were observed during the site visit, it is assumed that well water use at the site is limited to irrigation of lawns.

4.0 SURFACE WATER PATHWAY

4.1 Hydrologic Setting

The Fairburn Road Dump site is located in the Piedmont, in an area of substantial relief. The property slopes in an east-southeasterly direction to flood plain. Portions of the site are in annual- to ten-year flood plain. However, the primary source for potential contamination of surface water is located above the 500-year flood plain.

4.2 Surface Water Targets

The site borders the Chattahoochee River, the primary surface water supply for much of west central and southwest Georgia, east central and southeast Alabama, and the panhandle of Florida. The closest water intakes are operated by the Douglasville/Douglas County Water and Sewer Authority, eight and nine river miles downstream. These water intakes draw from Dog River and Bear Creek, tributary streams to the Chattahoochee. These intakes service some 22,000 accounts (approx. 83,600 persons). No other surface water is known on the site.

4.3 Surface Water Conclusions

In spite of the close proximity of the Chattahoochee River, no primary targets were identified for the surface water pathway. The Chattahoochee is a fishery in the 15-mile target area.

5.0 SOIL EXPOSURE AND AIR PATHWAY

5.1 Physical Conditions

The Fairburn Road Dump site is located in a rural/suburban area between Douglasville and Fairburn. Land use varies widely on and surrounding the site, and includes mining, commercial, industrial, retail, and residential interests. Access is unrestricted to the majority of the site because of its heterogeneous nature. That portion of the site most likely to contribute contaminants is Poor Folks Auto Salvage, an operating auto wrecking yard. Access to the junkyard is controlled by a chain link fence with a locked gate.

5.2 Soil and Air Targets

The two areas of concern when evaluating the soil exposure pathway at the Fairburn Road Dump Site are the exposure of residents and trespassers to contaminated soil, and the contamination of off-site soil by surface run-off from the site. There has been no testing of any soil from the site. The operation of Poor Folks Auto Salvage is the only visible source of contaminants. It employs approximately six people. No discolored runoff from the site was noted.

Three of the six adjacent lots contain residences; the other three are vacant. There are no schools or daycare facilities within 200 feet of the site.

No protected animals include Douglas County in their habitats. Protected plants whose range includes Douglas County include the endangered Amphianthus pusillus and the threatened Cypripedium calceolus var. pubescens and Schisandra glabra. None of these species were noted during the site inspection. Significantly, Amphianthus' range is restricted to depression pools in granite outcrops, and no granite was seen on the site.

5.3 Soil Exposure and Air Pathway Conclusions

The soil exposure pathway appears to pose a threat only to workers at the site of the junkyard; the area is fenced and protected by an alarm system. A release to air is not suspected due to the relatively immobile nature of the potential contaminants.

6.0 SUMMARY AND CONCLUSIONS

The Fairburn Road Dump Site was discovered through EPA's complaint system. This site is poorly characterized as to whether any materials were disposed, their location and amounts, and any potentially responsible parties to any disposal. The site is divided among many owners who have a variety of uses for their property. Some may be at exposure risk through contact with contaminated soil. No release to groundwater, surface water or air is suspected.

REFERENCES

1. Site Analysis: Fairburn Road Dump, Douglas County, Georgia, Environmental Photographic Interpretation Center, Environmental Monitoring Systems Laboratory, U. S. EPA. November 1991.
2. Billy Hendricks. Site reconnaissance of Fairburn Road Dump Site, conducted on 2/24/93, field notes.
3. Douglas County Tax Digest, Kimbel Cason, Tax Appraiser. Reviewed 2/24/93.
4. Keary Lord, Douglasville-Douglas County Water and Sewer Authority. Telephone conversation 3/1/93.
5. Lewis Tinley and Mike Almasi, EPD Land Protection Compliance Program. Telephone conversation, 2/26/93.
6. CENTRACTS report for Fairburn Road Dump Site, Douglas County, Georgia, Bob Frost, Frost Associates, 2/12/93.
7. Elizabeth Teal, telephone conversation, 3/16/93.
8. Flood Insurance Rate Map, Federal Emergency Management Agency, March 15, 1984, Community-Panel Number 130306 0035 B, Douglas County, Georgia.
9. National Wetlands Inventory, U. S. Department of the Interior, 1990, Campbellton, Georgia.
10. United States Geological Survey, 7.5 minute topographic map series, Austell, Mableton, Campbellton, and Ben Hill, Georgia (1954, photorevised 1982).
11. Geology of the Greater Atlanta Region, K. McConnell and C. Abrams, Georgia Department of Natural Resources Bulletin 96, 1984.
12. Georgia's Protected Wildlife, County cross-reference, Georgia Department of Natural Resources, Game and Fish Division.
13. Georgia's Protected Plants, Georgia Department of Natural Resources, Game and Fish Division.

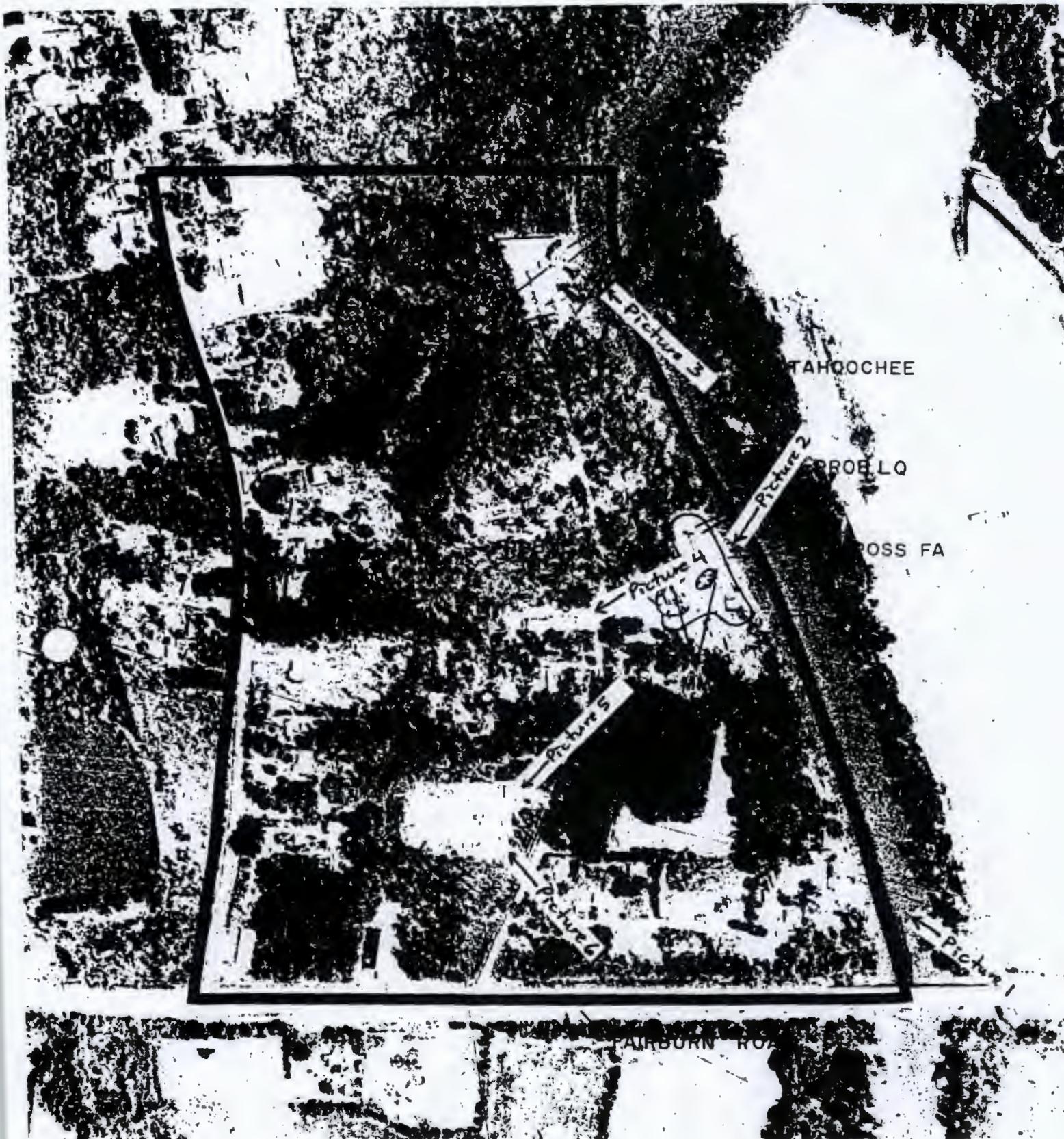
UNSCANNABLE

MEDIA

(PHOTOGRAPHS)

OVERSIZED

DOCUMENT

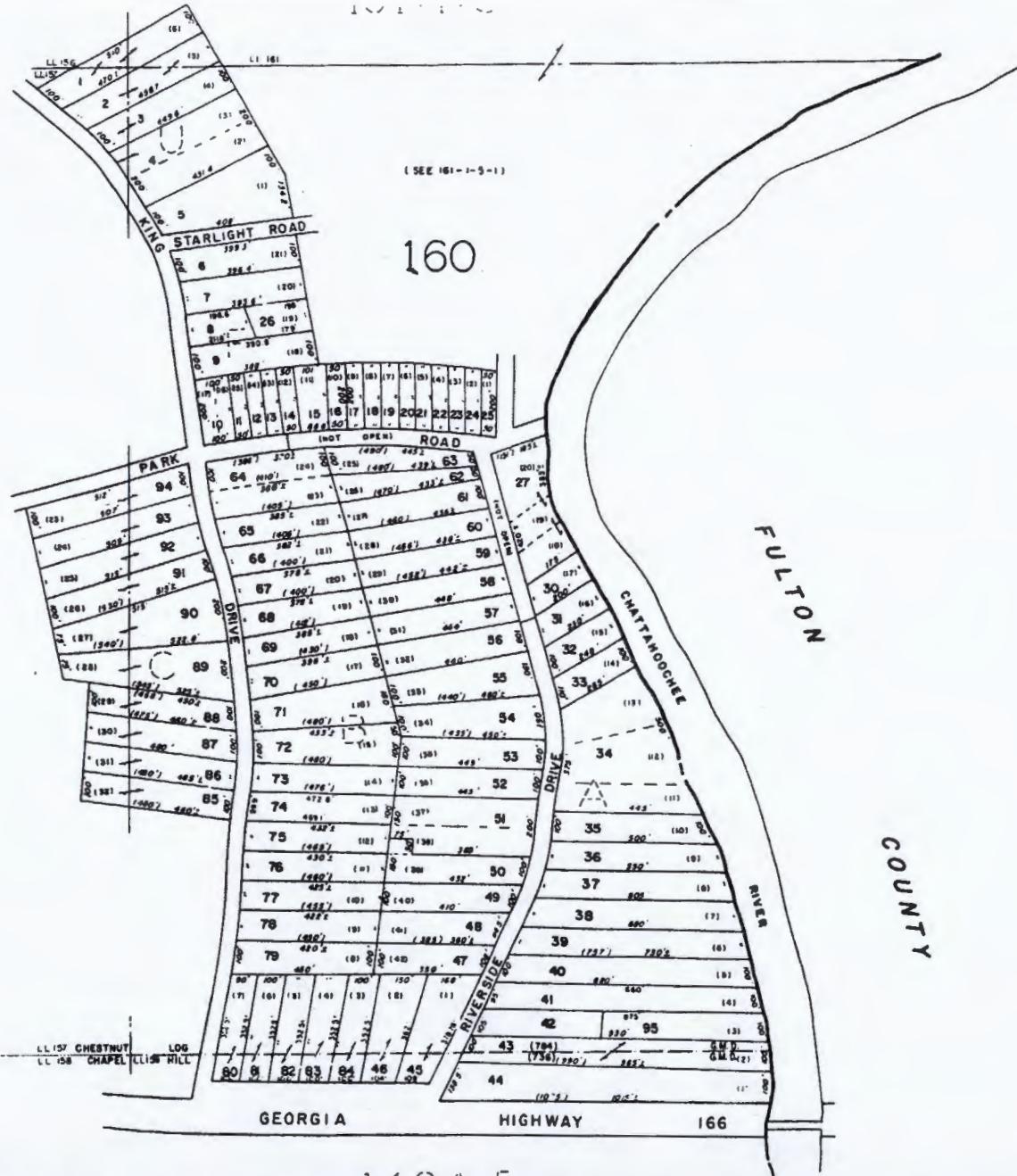


IRE 6
RN ROAD DUMP

APRIL 8, 1990

APPROX. SCALE 1:4,300

157-1-5



FULTON
COUNTY

LEGEND: - - - - - INDICATES ORIGINAL SUBDIVISION LINE
OPEN NUMBER INDICATES THE MAP LOT NUMBER
--- INDICATES THE SUBDIVISION LINE
DASHED LINE - - - - - IS LINE OF OWNERSHIP

NOTE: THIS WAS DRAWN FROM AN AERIAL SURVEY
DO NOT USE FOR PLATTING OR OTHER PURPOSES

RIVERSIDE GARDEN
UNIT 1 - PB 1, P 99
UNIT 4 - PB 1, P 21



163-1-5

146-1-5

2/24/93

TAX INQUIRY

11.14.03

Key the Line Number for Detail Record zz

	Name	Payer	HE	Parcel
01	GARRETT, JEAN H.	89	G013261	0160015 00027
02	GARRETT, JEAN H.	90	G013261	0160015 00027
03	GARRETT, JEAN H.	91	G013261	0160015 00027
04	GARRETT, JEAN H.	92	G013261	0160015 00027
05	GARRETT, JEAN H.	*	93 G013261	0160015 00027
06	GARRETT, JEAN H.	89	G013263	0160015 00028
07	GARRETT, JEAN H.	89	G013264	0160015 00029

1 CLARK, ETHEL MARTIN GIBSON &	90	C100200	0	0160015	00030
CLARK, ETHEL MARTIN GIBSON &	91	C100200	0	0160015	00030
M CLARK, ETHEL MARTIN GIBSON &	92	C100200	0	0160015	00030
12 CLARK, ETHEL MARTIN GIBSON &	*	93 C100200	0	0160015	00030
13 FOSS, JOHN MARVIN	89	F032050	0	0160015	00031
14 FOSS, JOHN MARVIN	90	F032050	0	0160015	00031
5 FOSS, JOHN MARVIN	91	F032050	0	0160015	00031

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2/24/93

TAX INQUIRY

11.14.22

Key the Line Number for Detail Record zz

Name

01 FOSS, JOHN MARVIN	*	92 F032050	0	0160015	00031
02 FOSS, JOHN MARVIN	*	93 F032050	0	0160015	00031
03 GARRETT, JEAN H.	89	G013265	0	0160015	00032
04 GARRETT, JEAN H.	90	G013265	0	0160015	00032
05 GARRETT, JEAN H.	91	G013265	0	0160015	00032
06 GARRETT, JEAN H.	92	G013265	0	0160015	00032
07 GARRETT, JEAN H.	*	93 G013265	0	0160015	00032
08 MCHAN, IRVIN LYNN	89	M153210	1	0160015	00033
09 MCHAN, IRVIN LYNN	90	M153210	1	0160015	00033
10 MCHAN, IRVIN LYNN	91	M153210	1	0160015	00033
11 MCHAN, IRVIN LYNN	92	M153210	1	0160015	00033
12 MCHAN, IRVIN LYNN	*	93 M153210	1	0160015	00033
13 RICHARDSON, FARRIS	89	R044295		0160015	00034
14 RICHARDSON, FARRIS	90	R044295	0	0160015	00034
15 RICHARDSON, FARRIS	91	R044295	0	0160015	00034

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03-49	SA	MW	KS	IM	II	S1	MW1
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2/24/93

TAX INQUIRY

11.14.38

Key the Line Number for Detail Record zz

Name

01 RICHARDSON, FARRIS	*	92 R044295	0	0160015	00034
02 RICHARDSON, FARRIS	*	93 R044295	0	0160015	00034
03 WHITAKER, HARRY R.	89	W071200	1	0160015	00035
04 WHITAKER, HARRY R.	90	W071200	1	0160015	00035
05 WHITAKER, HARRY R.	*	91 /935450	0	0160015	00035
06 WHITAKER, HARRY R.	91	W071200	1	0160015	00035
07 WHITAKER, HARRY R.	*	92 /935450	0	0160015	00035
08 WHITAKER, HARRY R.	92	W071200	1	0160015	00035
09 WHITAKER, HARRY R.	*	93 /935450	0	0160015	00035
10 WHITAKER, HARRY R.	*	93 W071200	1	0160015	00035
11 POWELL, BRUCE A. & THOMAS G.	89	P093645	0	0160015	00036
12 POWELL, BRUCE A.	90	P093645	0	0160015	00036
13 POWELL, BRUCE A.	91	P093645	0	0160015	00036
14 POWELL, BRUCE A.	*	92 P093645	0	0160015	00036
15 WHITAKER, HARRY R.	*	93 W071201	0	0160015	00036

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Key the Line Number for Detail Record zz

	Name	Payer	HE	Parcel	
01	POWELL, BRUCE A. & THOMAS G.	89	P093650	0	0160015 00037
02	POWELL, BRUCE A.	90	P093650	0	0160015 00037
03	POWELL, BRUCE A.	91	P093650	0	0160015 00037
04	POWELL, BRUCE A. & THOMAS G.	89	P093655	0	0160015 00038
05	POWELL, BRUCE A.	90	P093655	0	0160015 00038
06	POWELL, BRUCE A.	91	P093655	0	0160015 00038
07	POWELL, BRUCE A. & THOMAS G.	89	P093660	0	0160015 00039
08	POWELL, BRUCE A.	90	P093660	0	0160015 00039
09	POWELL, BRUCE A.	91	P093660	0	0160015 00039
10	BISHOP, W. T.	89	B088400	3	0160015 00040
11	BISHOP, VIRGINIA BLANCH	90	B088400	4	0160015 00040
12	BISHOP, VIRGINIA BLANCH	91	B088400	4	0160015 00040
13	BISHOP, VIRGINIA BLANCH	92	B088400	4	0160015 00040
14	BISHOP, VIRGINIA BLANCH	* 93	B088400	4	0160015 00040
15	GALLOWAY, MARY ELLEN	89	G005400	1	0160015 00041

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2/24/93

TAX INQUIRY

11.15.17

Key the Line Number for Detail Record zz

	Name	Payer	HE	Parcel	
01	GALLOWAY, MARY ELLEN	90	G005400	1	0160015 00041
02	GALLOWAY, MARY ELLEN	91	G005400	1	0160015 00041
03	GALLOWAY, MARY ELLEN	92	G005400	1	0160015 00041
04	GALLOWAY, MARY ELLEN	* 93	G005400	1	0160015 00041
05	ANDERS, JENNIE MAE	89	A035300	9	0160015 00042
06	ANDERS, JENNIE MAE	90	A035300	9	0160015 00042
07	ANDERS, JENNIE MAE	91	A035300	9	0160015 00042
08	ANDERS, JENNIE MAE	92	A035300	9	0160015 00042
09	ANDERS, JENNIE MAE	* 93	A035300	9	0160015 00042
10	ANDERS, JESSIE L.	89	A035310	0	0160015 00043
11	ANDERS, JESSIE L.	90	A035310	0	0160015 00043
12	ANDERS, JESSIE L.	91	A035310	0	0160015 00043
13	ANDERS, JESSIE L.	92	A035310	0	0160015 00043
14	ANDERS, JESSIE L.	* 93	A035310	0	0160015 00043
15	COLEVINS, ANNA & NICK	89	C137400	0	0160015 00044

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2/24/93

TAX INQUIRY

11.15.30

Key the Line Number for Detail Record zz

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01	COLEVINS, ANNA & NICK	90	C137400	0	0160015 00044
02	COLEVINS, ANNA & NICK	91	C137400	0	0160015 00044
03	COLEVINS, ANNA & NICK	92	C137400	0	0160015 00044
04	COLEVINS, ANNA & NICK	* 93	C137400	0	0160015 00044
05	POWELL, BRUCE A. & THOMAS G.	89	P093640	0	0160015 00045
06	POWELL, BRUCE A.	90	P093640	0	0160015 00045
07	POWELL, BRUCE A.	91	P093640	0	0160015 00045
08	POWELL, BRUCE A.	* 92	P093640	0	0160015 00045

10 POWELL, BRUCE A. & THOMPSON JR.	03 P093635	O	0160015 00046
11 POWELL, BRUCE A.	90 P093635	O	0160015 00046
12 POWELL, BRUCE A.	91 P093635	O	0160015 00046
13 THOMPSON, FRANK, JR.	89 T037490	O	0160015 00047
14 THOMPSON, FRANK, JR.	90 T037490	O	0160015 00047
15 THOMPSON, FRANK, JR.	91 T037490	O	0160015 00047

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2/24/93

TAX INQUIRY

11.16.02

Key the Line Number for Detail Record zz

Name	Payer	HE	Parcel
01 THOMPSON, FRANKLIN H., JR. &	92 T037490	O	0160015 00047
02 THOMPSON, FRANKLIN H., JR. &	* 93 T037490	O	0160015 00047
03 THOMPSON, FRANKLIN H., JR.	89 T037500	O	0160015 00048
04 THOMPSON, FRANKLIN H., JR.	90 T037500	O	0160015 00048
05 DOUGLAS COUNTY WRECKER	91 /270150	O	0160015 00048
06 POOR FOLKS AUTO SALVAGE	91 /705300	O	0160015 00048
07 THOMPSON, FRANKLIN H., JR.	91 T037500	O	0160015 00048
08 DOUGLAS COUNTY WRECKER	92 /270150	O	0160015 00048
09 POOR FOLKS AUTO SALVAGE	92 /705300	O	0160015 00048
10 THOMPSON, FRANKLIN H., JR. &	92 T037500	O	0160015 00048
11 DOUGLAS COUNTY WRECKER	* 93 /270150	O	0160015 00048
12 POOR FOLKS AUTO SALVAGE	* 93 /705300	O	0160015 00048
13 THOMPSON, FRANKLIN H., JR. &	* 93 T037500	O	0160015 00048
14 FOX, ERNEST I.	89 F041600	O	0160015 00049
15 FOX, ERNEST I.	90 F041600	O	0160015 00049

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2/24/93

TAX INQUIRY

11.16.25

Key the Line Number for Detail Record zz

Name	Payer	HE	Parcel
01 FOX, ERNEST I.	91 F041600	O	0160015 00049
02 FOX, ERNEST I.	92 F041600	O	0160015 00049
03 MCCONNELL, DOUGLAS J. &	* 93 M135567	O	0160015 00049
04 CARROLL, JIMMIE	89 C051900	1	0160015 00050
05 CARROLL, JIMMIE	90 C051900	1	0160015 00050
06 CARROLL, JIMMIE G.	* 91 /161700	O	0160015 00050
07 CARROLL, JIMMIE	91 C051900	1	0160015 00050
08 CARROLL, JIMMIE G.	* 92 /161700	O	0160015 00050
09 CARROLL, JIMMIE	92 C051900	1	0160015 00050
10 CARROLL, JIMMIE G.	* 93 /161700	O	0160015 00050
11 CARROLL, JIMMIE	* 93 C051900	1	0160015 00050
12 CARROLL, HERMAN P. & WANDA F.	89 C051600	1	0160015 00051
13 CARROLL, HERMAN P. & WANDA F.	90 C051600	1	0160015 00051
14 CARROLL, HERMAN P. & WANDA F.	91 C051600	1	0160015 00051
15 CARROLL, HERMAN P.	* 92 /161450	O	0160015 00051

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2/24/93

TAX INQUIRY

11.16.40

Name	Payer	HE	Parcel
01 CARROLL, HERMAN P. & WANDA F.	92 C051600	1	0160015 00051
02 CARROLL, HERMAN P.	* 93 /161450	0	0160015 00051
03 CARROLL, HERMAN P. & WANDA F.	* 93 C051600	1	0160015 00051
04 STANLEY, DENNIS R.	89 S138177		0160015 00052
05 STANLEY, DENNIS R.	90 S138177		0160015 00052
06 STANLEY, DENNIS R.	91 S138177	0	0160015 00052
07 STANLEY, DENNIS R.	92 S138177	0	0160015 00052
08 STANLEY, DENNIS R.	* 93 S138177	0	0160015 00052
09 STANLEY, DENNIS R. & ROSEANN	89 S138179	0	0160015 00053
10 STANLEY, DENNIS R. & ROSEANN	90 S138179	0	0160015 00053
11 STANLEY, DENNIS R. & ROSEANN	91 S138179	0	0160015 00053
12 STANLEY, DENNIS R. & ROSEANN	92 S138179	0	0160015 00053
13 STANLEY, DENNIS R. & ROSEANN	* 93 S138179	0	0160015 00053
14 STANLEY, DENNIS R. & ROSEANN	89 S138180	0	0160015 00054
15 STANLEY, DENNIS R. & ROSEANN	90 S138180	0	0160015 00054

Cmd 1 - Return to Menu

Cmd 3 - Return To Select

03-49	SA	MW	KS	IM	II	S1	MW1
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2/24/93

TAX INQUIRY

11.16.52

Key the Line Number for Detail Record zz

Name	Payer	HE	Parcel
01 STANLEY, DENNIS R. & ROSEANN	91 S138180	0	0160015 00054
02 STANLEY, DENNIS R. & ROSEANN	92 S138180	0	0160015 00054
03 STANLEY, DENNIS R. & ROSEANN	* 93 S138180	0	0160015 00054
04 STANLEY, DENNIS R.	89 S138175	1	0160015 00055
05 DIESEL DOCTOR, THE	90 /258200	0	0160015 00055
06 STANLEY, DENNIS R.	90 S138175	1	0160015 00055
07 DIESEL DOCTOR, THE	91 /258200	0	0160015 00055
08 STANLEY, DENNIS R.	91 S138175	1	0160015 00055
09 DIESEL DOCTOR, THE	92 /258200	0	0160015 00055
10 STANLEY, DENNIS R.	92 S138175	1	0160015 00055
11 DIESEL DOCTOR, THE	* 93 /258200	0	0160015 00055
12 STANLEY, DENNIS R.	* 93 S138175	1	0160015 00055
13 ROGERS, HENRY R.	89 R078300	0	0160015 00056
14 STANLEY, ROSEANN	90 S138499	0	0160015 00056
15 STANLEY, ROSEANN	91 S138499	0	0160015 00056

Cmd 1 - Return to Menu

Cmd 3 - Return To Select

03-49	SA	MW	KS	IM	II	S1	MW1
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TAX INQUIRY

11.17.07

Key the Line Number for Detail Record zz

Name	Payer	HE	Parcel
01 STANLEY, ROSEANN	92 S138499	0	0160015 00056
02 STANLEY, ROSEANN	* 93 S138499	0	0160015 00056
03 KNIGHT, B. J.	89 K033000	0	0160015 00057
04 KNIGHT, B. J.	90 K033000	0	0160015 00057
05 KNIGHT, B. J.	91 K033000	0	0160015 00057
06 KNIGHT, B. J.	* 92 K033000	0	0160015 00057
07 KNIGHT, B. J.	* 93 K033000	0	0160015 00057
08 STANLEY, ROSEANN	89 S138500		0160015 00058
09 STANLEY, ROSEANN	90 S138500	0	0160015 00058
10 STANLEY, ROSEANN	91 S138500	0	0160015 00058

13 STANLEY, ROSEANN
14 STANLEY, ROSEANN
15 STANLEY, ROSEANN

89 S138501 0160015 00059
90 S138501 0 0160015 00059
91 S138501 0 0160015 00059

Cmd 1 - Return to Menu

Cmd 3 - Return To Select
03-49 SA MW KS IM II S1 MW1

2/24/93

TAX INQUIRY

11.17.20

Key the Line Number for Detail Record zz

Name
01 STANLEY, ROSEANN
02 STANLEY, ROSEANN
03 YOUNGBLOOD, MARTHA L., MRS.
04 YOUNGBLOOD, MARTHA L., MRS.
05 YOUNGBLOOD, MARTHA L., MRS.
06 YOUNGBLOOD, MARTHA L., MRS.
07 YOUNGBLOOD, MARTHA L., MRS.
08 BURGER, HELEN, MRS.
09 BURGER, HELEN, MRS.
10 BURGER, HELEN, MRS.
11 BURGER, HELEN, MRS.
12 BURGER, HELEN, MRS.
13 BURGER, HELEN, MRS.
14 BURGER, HELEN, MRS.
15 BURGER, HELEN, MRS.

	Payer	HE	Parcel
92	S138501	0	0160015 00059
*	93	S138501	0
89	Y009000	0	0160015 00060
90	Y009000	0	0160015 00060
91	Y009000	0	0160015 00060
92	Y009000	0	0160015 00060
*	93	Y009000	0
89	B187300	0	0160015 00061
90	B187300	0	0160015 00061
91	B187300	0	0160015 00061
92	B187300	0	0160015 00061
*	93	B187300	0
89	B187400	0	0160015 00062
90	B187400	0	0160015 00062
91	B187400	0	0160015 00062

Cmd 1 - Return to Menu
Cmd 3 - Return To Select

03-49 SA MW KS IM II S1 MW1

2/24/93

TAX INQUIRY

11.17.35

Key the Line Number for Detail Record zz

Name
01 BABB, DON
02 BABB, DON
03 BABB, DON
04 BABB, DON
05 BABB, DON
06 TAYLOR, JAMES T.
07 DOUGLASVILLE SHEET METAL CO. INC.
08 TAYLOR, JAMES T.
09 DOUGLASVILLE SHEET METAL CO., INC.
10 TAYLOR, JAMES T.
11 DOUGLASVILLE SHEET METAL CO., INC.
12 TAYLOR, JAMES T.
13 DOUGLASVILLE SHEET METAL CO., INC.
14 TAYLOR, JAMES T.
15 HINDMAN, A. W. (ANDY)

	Payer	HE	Parcel
89	B003551	0	0160015 00063
90	B003551	0	0160015 00063
91	B003551	0	0160015 00063
92	B003551	0	0160015 00063
*	93	B003551	0
89	T014610	0	0160015 00064
90	/277800	0	0160015 00064
90	T014610	0	0160015 00064
91	/277800	0	0160015 00064
91	T014610	0	0160015 00064
92	/277800	0	0160015 00064
*	92	T014610	0
* 93	/277800	0	0160015 00064
* 93	T014610	0	0160015 00064
89	H119400	0	0160015 00065

Cmd 1 - Return to Menu
Cmd 3 - Return To Select

03-49 SA MW KS IM II S1 MW1

2/24/93

TAX INQUIRY

11.17.53

Key the Line Number for Detail Record zz

01	HINDMAN, A. W. (ANDY)	90	H119400	9	0160015	00065	
02	HINDMAN, A. W. (ANDY)	*	91	H119400	9	0160015	00065
03	HINDMAN, A. W. (ANDY)	92	H119400	0	0160015	00065	
04	HINDMAN, A. W. (ANDY)	*	93	H119400	0	0160015	00065
05	SUTTON, EFFIE L.	89	S197515	0	0160015	00066	
06	SUTTON, EFFIE L.	90	S197515	0	0160015	00066	
07	SUTTON, S. O.	91	S197826	0	0160015	00066	
08	SUTTON, BENNY P. & BOBBY M.	92	S197352	0	0160015	00066	
09	SUTTON, BENNY P. & BOBBY M.	*	93	S197352	0	0160015	00066
10	SUTTON, EFFIE L.	89	S197516	0	0160015	00067	
11	SUTTON, EFFIE L.	90	S197516	0	0160015	00067	
12	SUTTON, S. O.	91	S197827	0	0160015	00067	
13	SUTTON, SCARLET DAWN	92	S197950	0	0160015	00067	
14	SUTTON, SCARLET DAWN	*	93	S197950	0	0160015	00067
15	MEWBORN, DAVID L. & TERESA D.	89	M050810	1	0160015	00068	

Cmd 1 - Return to Menu

Cmd 3 - Return To Select

03-49	SA	MW	KS	IM	II	S1	MW1
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2/24/93

TAX INQUIRY

11.18.06

Key the Line Number for Detail Record zz

Name		Payer	HE	Parcel		
01	MEWBORN, DAVID L. & TERESA D.	90	M050810	1	0160015 00068	
02	MEWBORN, DAVID L. & TERESA D.	91	M050810	1	0160015 00068	
03	MEWBORN, DAVID L. & TERESA D.	92	M050810	1	0160015 00068	
04	MEWBORN, DAVID L. & TERESA D.	*	93	M050810	1	0160015 00068
05	HARRIS, LEE	89	H052490	1	0160015 00069	
06	HARRIS, LEE	90	H052490	1	0160015 00069	
07	HARRIS, LEE	91	H052490	1	0160015 00069	
08	HARRIS, LEE	92	H052490	1	0160015 00069	
09	HARRIS, LEE	*	93	H052490	1	0160015 00069
10	HARRIS, VICKEY LEE & RITA FAYE	89	H053895	0	0160015 00070	
11	HARRIS, VICKEY LEE & RITA FAYE	90	H053895	0	0160015 00070	
12	HARRIS, VICKEY LEE & RITA FAYE	91	H053895	0	0160015 00070	
13	HARRIS, VICKEY LEE & RITA FAYE	92	H053895	0	0160015 00070	
14	HARRIS, VICKEY LEE & RITA FAYE	*	93	H053895	0	0160015 00070
15	HIPPS, OMIE LEOLA	89	H121300	9	0160015 00071	

Cmd 1 - Return to Menu

Cmd 3 - Return To Select

03-49	SA	MW	KS	IM	II	S1	MW1
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2/24/93

TAX INQUIRY

11.18.23

Key the Line Number for Detail Record zz

Name		Payer	HE	Parcel		
01	HIPPS, OMIE LEOLA	90	H121300	9	0160015 00071	
02	HIPPS, OMIE LEOLA	91	H121300	9	0160015 00071	
03	HIPPS, OMIE LEOLA	92	H121300	9	0160015 00071	
04	HIPPS, OMIE LEOLA	*	93	H121300	9	0160015 00071
05	CHAMPION, WILLIAM VERNON	89	C078150		0160015 00072	
06	CHAMPION, WILLIAM VERNON	90	C078150		0160015 00072	
07	CHAMPION, WILLIAM VERNON	91	C078150	0	0160015 00072	
08	CHAMPION, WILLIAM VERNON	92	C078150	0	0160015 00072	
09	CHAMPION, EULA MAE	*	93	C077296	0	0160015 00072
10	MCGINNIS, H. W.	89	M149700	0	0160015 00073	
11	MCGINNIS, H. W.	90	M149700	0	0160015 00073	
12	MCGINNIS, H. W.	91	M149700	0	0160015 00073	

AT TIGARD, OR W
15 GRIFFIN, DAVID MARK

89 G096325 1

0160015 00074

Cmd 1 - Return to Menu

Cmd 3 - Return To Select

3-49

SA

MW

KS

IM

II

S1

MW1

2/24/93

TAX INQUIRY

11.18.37

Key the Line Number for Detail Record zz

Name	Payer	HE	Parcel		
01 GRIFFIN, DAVID MARK	90	G096325	1	0160015 00074	
02 GRIFFIN, DAVID MARK	91	G096325	1	0160015 00074	
03 GRIFFIN, DAVID MARK	*	92	G096325	1	0160015 00074
04 GRIFFIN, DAVID MARK	*	93	G096325	1	0160015 00074
05 GRIFFIN, BARBARA MARIE WALKER	89	G096160		0160015 00075	
06 GRIFFIN, BARBARA MARIE WALKER	90	G096160		0160015 00075	
07 GRIFFIN, BARBARA MARIE WALKER	91	G096160	0	0160015 00075	
08 GRIFFIN, BARBARA MARIE WALKER	92	G096160	0	0160015 00075	
09 GRIFFIN, BARBARA MARIE WALKER	*	93	G096160	0	0160015 00075
10 COLTHARP, AVAN	89	C142300	9	0160015 00076	
11 COLTHARP, AVAN	90	C142300	9	0160015 00076	
12 COLTHARP, AVAN	91	C142300	9	0160015 00076	
13 COLTHARP, AVAN	92	C142300	9	0160015 00076	
14 COLTHARP, AVAN	*	93	C142300	9	0160015 00076
15 BURNS, JUDY ANN	89	B190375	1	0160015 00077	

Cmd 1 - Return to Menu

Cmd 3 - Return To Select

3-49

SA

MW

KS

IM

II

S1

MW1

2/24/93

TAX INQUIRY

11.18.51

Key the Line Number for Detail Record zz

Name	Payer	HE	Parcel		
01 BURNS, JUDY ANN	90	B190375	1	0160015 00077	
02 BURNS, JUDY ANN	91	B190375	1	0160015 00077	
03 BURNS, JUDY ANN	92	B190375	1	0160015 00077	
04 BURNS, JUDY ANN	*	93	B190375	1	0160015 00077
05 PAYNE, LILLIE	89	P031000	0	0160015 00078	
06 PAYNE, LILLIE	90	P031000	0	0160015 00078	
07 PAYNE, LILLIE	91	P031000	0	0160015 00078	
08 PAYNE, LILLIE	92	P031000	0	0160015 00078	
09 PAYNE, LILLIE	*	93	P031000	0	0160015 00078
10 GRIFFIN, MARIE W.	89	G096850	0	0160015 00079	
11 GRIFFIN, MARIE W.	90	G096850	0	0160015 00079	
12 GRIFFIN, MARIE W.	91	G096850	0	0160015 00079	
13 GRIFFIN, MARIE W.	92	G096850	0	0160015 00079	
14 GRIFFIN, MARIE W.	*	93	G096850	0	0160015 00079
15 GRIFFIN, BARBARA MARIE WALKER	89	G096165		0160015 00080	

Cmd 1 - Return to Menu

Cmd 3 - Return To Select

3-49

SA

MW

KS

IM

II

S1

MW1

2/24/93

TAX INQUIRY

11.19.00

Key the Line Number for Detail Record zz

Name

Payer HE

Parcel

03	GRiffin, BARBARA MARIE WALKER	91	G096165	0160015	00080
04	GRiffin, BARBARA MARIE WALKER	92	G096165	0160015	00080
05	GRiffin, BARBARA MARIE WALKER,	*	93 G096165	0160015	00080
06	SIDES, PEARSON G.	89	S056400	0	0160015 00081
07	SIDES, PEARSON G.	90	S056400	0	0160015 00081
08	SIDES, PEARSON G.	91	S056400	0	0160015 00081
09	SIDES, PEARSON G.	92	S056400	0	0160015 00081
10	SIDES, PEARSON G.	*	93 S056400	0	0160015 00081
11	JOHNSON, HERBERT L. &	89	J031100	0	0160015 00082
12	JOHNSON, HERBERT L. &	90	J031100	0	0160015 00082
13	JOHNSON, HERBERT L. &	91	J031100	0	0160015 00082
14	JOHNSON, HERBERT L. &	92	J031100	0	0160015 00082
15	JOHNSON, HERBERT L. &	*	93 J031100	0	0160015 00082

Cmd 1 - Return to Menu

Cmd 3 - Return To Select

03-49	SA	MW	KS	IM	II	S1	MW1
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2/24/93

TAX INQUIRY

11.19.08

Key the Line Number for Detail Record zz

Name		Payer	HE	Parcel
01	POWELL, BRUCE A. & THOMAS G.	89	P093630	0
02	POWELL, BRUCE A.	90	P093630	0
03	POWELL, BRUCE A.	91	P093630	0
04	POWELL, BRUCE A.	*	92 P093630	0
05	POWELL, BRUCE A.	*	93 P093630	0
06	OXFORD, R. H.	89	0019050	0
07	OXFORD'S GROCERY & SEVICE STATION	90	/671000	0
08	OXFORD, R. H.	90	0019050	0
09	OXFORD'S GROCERY & SEVICE STATION	91	/671000	0
10	OXFORD, R. H.	91	0019050	0
11	OXFORD'S GROCERY & SEVICE STATION	92	/671000	0
12	OXFORD, R. H.	92	0019050	0
13	OXFORD'S GROCERY & SEVICE STATION	*	93 /671000	0
14	OXFORD, R. H.	*	93 0019050	0
15	FULLER, RUTH	89	F051200	9

Cmd 1 - Return to Menu

Cmd 3 - Return To Select

03-49	SA	MW	KS	IM	II	S1	MW1
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2/24/93

TAX INQUIRY

11.19.20

Key the Line Number for Detail Record zz

Name		Payer	HE	Parcel
01	FULLER, RUTH	90	F051200	9
02	FULLER, RUTH	91	F051200	9
03	FULLER, RUTH	92	F051200	9
04	GRAY, H. E.	*	93 G084405	0
05	EIDSON, CHESTER M.	89	E015600	1
06	EIDSON, CHESTER M.	90	E015600	1
07	EIDSON, CHESTER M.	91	E015600	1
08	EIDSON, CHESTER M.	92	E015600	1
09	EIDSON, CHESTER M.	*	93 E015600	1
10	WATERS, ED	89	W033700	1
11	WATERS, ED	90	W033700	1
12	WATERS, ED	*	91 W033700	1
13	WATERS, ED	*	92 W033700	1
14	WATERS, ED	*	93 W033700	1

Cmd 1 - Return to Menu
Cmd 3 - Return To Select

03-49 SA MW KS IM II S1 MW1

2/24/93

TAX INQUIRY

11.19.34

Key the Line Number for Detail Record zz

	Name	Payer	HE	Parcel	
01	KING, JOHN L.	90	K021900	1	0160015 00088
02	KING, JOHN L.	91	K021900	1	0160015 00088
03	KING, JOHN L.	92	K021900	1	0160015 00088
04	KING, JOHN L.	*	93 K021900	1	0160015 00088
05	HARRISON, CELESTE S.	89	H054500	0	0160015 00089
06	HARRISON, CELESTE S.	90	H054500	0	0160015 00089
07	HARRISON, DILLIARD	91	H054500	0	0160015 00089
08	HARRISON, DILLIARD	92	H054500	0	0160015 00089
09	HARRISON, DILLIARD	*	93 H054500	0	0160015 00089
10	HARRISON, CELESTE S.	89	H054400	1	0160015 00090
11	HARRISON, CELESTE S.	90	H054400	1	0160015 00090
12	HARRISON, DILLIARD	91	H054400	1	0160015 00090
13	HARRISON, DILLIARD	92	H054400	1	0160015 00090
14	HARRISON, DILLIARD	*	93 H054400	1	0160015 00090
15	HARRISON, CELESTE S.	89	H054600	0	0160015 00091

Cmd 1 - Return to Menu
Cmd 3 - Return To Select

03-49 SA MW KS IM II S1 MW1

2/24/93

TAX INQUIRY

11.19.51

Key the Line Number for Detail Record zz

	Name	Payer	HE	Parcel	
01	HARRISON, CELESTE S.	90	H054600	0	0160015 00091
02	HARRISON, DILLIARD	91	H054600	0	0160015 00091
03	HARRISON, DILLIARD	92	H054600	0	0160015 00091
04	HARRISON, DILLIARD	*	93 H054600	0	0160015 00091
05	HARRISON, CELESTE S.	89	H054450	0	0160015 00092
06	HARRISON, CELESTE S.	90	H054450	0	0160015 00092
07	HARRISON, DILLIARD	91	H054450	0	0160015 00092
08	HARRISON, DILLIARD	92	H054450	0	0160015 00092
09	HARRISON, DILLIARD	*	93 H054450	0	0160015 00092
10	COLE, ROBERT W.	89	C135300	0	0160015 00093
11	COLE, ROBERT W.	90	C135300	0	0160015 00093
12	COLE, ROBERT W.	91	C135300	0	0160015 00093
13	COLE, ROBERT W.	92	C135300	0	0160015 00093
14	COLE, ROBERT W.	*	93 C135300	0	0160015 00093
15	PARKER, VARNELLE & GERALDINE	89	P014300	0	0160015 00094

Cmd 1 - Return to Menu
Cmd 3 - Return To Select

03-49 SA MW KS IM II S1 MW1

2/24/93

TAX INQUIRY

11.20.03

Key the Line Number for Detail Record zz

	Name	Payer	HE	Parcel	
01	PARKER, VARNELLE & GERALDINE	90	P014300	0	0160015 00094
02	PARKER, VARNELLE & GERALDINE	91	P014300	0	0160015 00094

04 PARKER, VARNELLE & GERALDINE	*	93 P014300	0	0160015 00094
05 ANDERS, LAWRENCE		89 A035377	0	0160015 00095
06 ANDERS, LAWRENCE		90 A035377	0	0160015 00095
07 ANDERS, LAWRENCE		91 A035377	0	0160015 00095
08 ANDERS, LAWRENCE		92 A035377	0	0160015 00095
09 ANDERS, LAWRENCE	*	93 A035377	0	0160015 00095
10 CARROLL, JIMMY L.	*	91 /161725	0	0160015000050
11 CARROLL, JIMMY L.	*	92 /161725	0	0160015000050
12 CARROLL, JIMMY L.	*	93 /161725	0	0160015000050
13 ROL, INC.		89 R079690	0	0161015 00001
14 ROL, INC.		90 R079690	0	0161015 00001
15 ROL, INC.		91 R079690	0	0161015 00001

Cmd 1 - Return to Menu

Cmd 3 - Return To Select

03-49

SA

MW

KS

IM

II

S1

MW1

GEORGIA'S PROTECTED WILDLIFE COUNTY CROSS-REFERENCE

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
Dade		X																H											X				
Dawson										X								X	X														
Decatur																																	
DeKalb																																	
Dodge						X																											
Dooly																																	
Dougherty													X																				
Douglas																																	
Early																																	
Echols																																	
Effingham											X																						
Elbert																																	
Emanuel																																	
Evans																																	
Fannin																																	
Fayette																																	
Floyd																																	
Forsyth																																	
Franklin																																	
Fulton																																	
Gilmer																																	
Glascock																																	
Glynn																																	
Gordon																																	
Grady																																	
Greene																																	
Gwinnett																																	
Habersham																																	
Hall																																	
Hancock																																	
Haralson																																	
Harris																																	
Hart																																	
Heard																																	
Henry																																	
Houston						X																											
Irwin																																	
Jackson																																	
Jasper																																	
Jeff Davis	X																																

X=General occurrence, see appendix; 0=Occurs in offshore waters only;
 W=Winter occurrence only; S=Summer occurrence only; M=Occurs irregularly
 as a migrant; R=Release or potential release site; H=Historical occurrence

SHORTNOSE STURGEON
 SPOTTED PINNACLE
 YELLOWFIN MADTOM
 SOUTHERN CAVEFISH
 AMBER DARTER
 CONASAUGA LOGPERCH
 SNAIL DARTER
 GEORGIA BLIND SALAMANDER
 ATLANTIC GREEN TURTLE
 ATLANTIC HAWKSBILL
 LOGGERHEAD
 ATLANTIC RIDLEY
 LEATHERBACK
 AMERICAN ALLIGATOR
 EASTERN INDIGO SNAKE
 EASTERN BROWN PELICAN
 WOOD STORK
 SOUTHERN BALD EAGLE
 PEREGRINE FALCON
 PIPING PLOVER
 RED-COCKADED WOODPECKER
 IVORY-BILLED WOODPECKER
 BACHMAN'S WARBLER
 KIRTLAND'S WARBLER
 GRAY BAT
 INDIANA BAT
 SHERMAN'S POCKET GOPHER
 COUGAR
 SEI WHALE
 FIN WHALE
 HUMPBACK WHALE
 BLACK KNIGHT WHALE
 SPERM WHALE
 WEST INDIAN MANATEE

TABLE I STATUS AND BASIS FOR CLASSIFICATION FOR
GEORGIA'S PROTECTED PLANT SPECIES

SCIENTIFIC NAME	STATUS	BASIS FOR CLASSIFICATION					
		RARITY				OTHER FACTORS	
	ENDANGERED	THREATENED	RARE THROUGHOUT	RARE DISJUNCT	RARE PERIPHERAL	EXPLOITED	RAPID HABITAT LOSS
*1. <i>Amphianthus pusillus</i>	X		X				X
2. <i>Arabis georgiana</i>		X	X				
3. <i>Asplenium heteroresiliens</i>		X			X		
4. <i>Baptisia arachnifera</i>	X		X				X
5. <i>Bumelia thornei</i>	X		X				
6. <i>Cacalia diversifolia</i>		X	X				
7. <i>Calamintha ashei</i>		X	X	X			
8. <i>Carex amplisquama</i>		X	X				
9. <i>Carex biltmoreana</i>		X	X				
10. <i>Carex misera</i>		X	X				
11. <i>Carex purpurifera</i>		X	X				
12. <i>Croomia pauciflora</i>		X	X				
13. <i>Cuscuta harperi</i>		X	X				
14. <i>Cypripedium acaule</i>	X						X

* The numbers beside each species correspond to the species reference num in Table II.

TABLE I STATUS AND BASIS FOR CLASSIFICATION FOR
GEORGIA'S PROTECTED PLANT SPECIES
(CONTINUED)

SCIENTIFIC NAME	STATUS	BASIS FOR CLASSIFICATION					
		ENDANGERED	THREATENED	RARE THROUGHOUT	RARE DISJUNCT	RARE PERIPHERAL	OTHER FACTORS
15. <i>Cypripedium calceolus</i> var. <i>pubescens</i>	X	X					X
16. <i>Draba aprica</i>	X		X	X			
17. <i>Echinacea laevigata</i>	X	X		X			
18. <i>Elliottia racemosa</i>	X			X			
19. <i>Fimbristylis perpusilla</i>	X			X			
20. <i>Fothergilla gardenii</i>		X		X			
21. <i>Hartwrightia floridana</i>		X		X			
22. <i>Hydrastis canadensis</i>	X			X			
23. <i>Hymenocallis coronaria</i>	X			X			
24. <i>Isoetes melanospora</i>		X		X			
25. <i>Jeffersonia diphylla</i>	X					X	
26. <i>Leavenworthia exigua</i> var. <i>exigua</i>		X		X			
27. <i>Lindernia saxicola</i>	X			X			
28. <i>Litsea aestivalis</i>		X		X			

TABLE I STATUS AND BASIS FOR CLASSIFICATION FOR
GEORGIA'S PROTECTED PLANT SPECIES
(CONTINUED)

SCIENTIFIC NAME	STATUS	BASIS FOR CLASSIFICATION					
		RARITY			OTHER FACTORS		
ENDANGERED	THREATENED	RARE THROUGHOUT	RARE DISJUNCT	RARE PERIPHERAL	EXPLOITED	RAPID HABITAT LOSS	
43. <i>Sarracenia purpurea</i>	X					X	X
44. <i>Sarracenia rubra</i>	X		X			X	X
45. <i>Schisandra glabra</i>		X	X				
46. <i>Schizachyrium niveum</i>		X	X				
47. <i>Scutellaria montana</i>		X	X				
48. <i>Sedum pusillum</i>		X					
49. <i>Senecio millefolium</i>		X	X				
50. <i>Shortia galacifolia</i>	X		X				
51. <i>Silene polypetala</i>	X		X				
52. <i>Thalictrum debile</i>		X	X				X
53. <i>Torreya taxifolia</i>	X		X		X		
54. <i>Trientalis borealis</i>	X						
55. <i>Trillium persistens</i>	X		X				
56. <i>Veratrum woodii</i>	X		X				

TABLE II COUNTY CROSS-REFERENCE INDEX (CONTINUED)

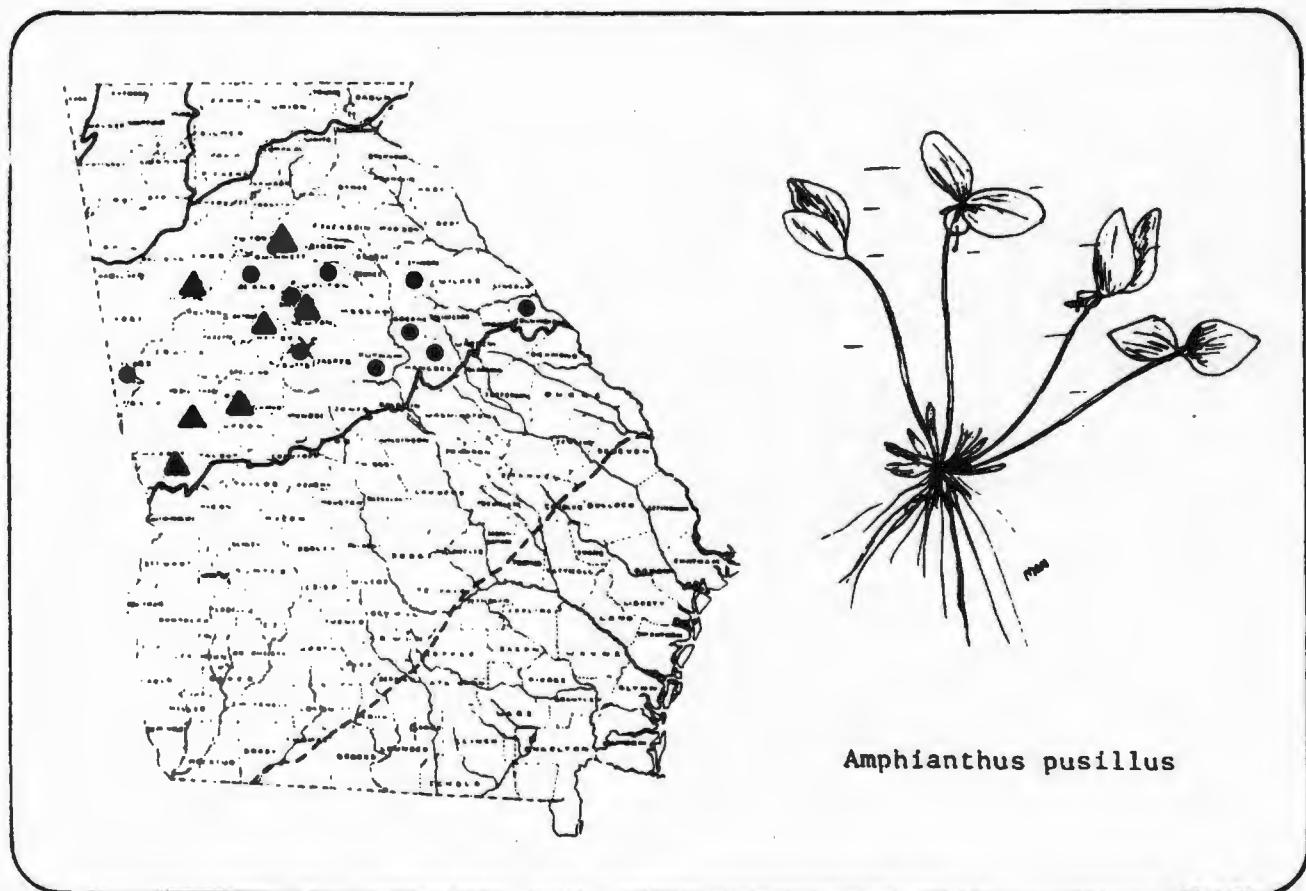
COUNTY	SPECIES REFERENCE NUMBERS	COUNTY TOTAL
Dade	2, 14, 15, 22	4
Dawson	14, 15, 22	3
Decatur	12, 29, 30, 51, 53	5
DeKalb	1, 14, 15, 24, 45, 48, 56	7
Dodge	39, 41	2
Dooly	32, 39, 41	3
Dougherty	41	1
Douglas	1, 15, 45	3
Early	5, 6, 30, 37, 38, 41, 44, 56	8
Echols	39, 41	2
Effingham	28, 39	2
Elbert	36, 48	2
Emmanuel	18, 39, 41, 42, 44	5
Evans	18, 39, 41	3
Fannin	14, 15	2
Fayette		0
Floyd	2, 11, 14, 15, 47, 52, 57	7
Forsyth	14, 15	2
Franklin	14, 15, 45	3
Fulton	14, 15, 45, 56	4
Gilmer	8, 14, 15, 54	4
Glascock		0
Glynn	28, 41	2
Gordon	2, 14, 15, 47	4
Grady	41	1
Greene	1, 14, 36	3
Gwinnett	1, 15, 22, 24, 45, 56, 58	7
Habersham	14, 15, 55	3
Hall	14, 31	2
Hancock	1	1
Haralson	14	1
Harris	1, 23, 37	3
Hart		0
Heard	1, 15, 45	3
Henry	1, 48	2
Houston		0
Irwin	18, 28, 39, 41, 42	5
Jackson		0
Jasper	36	1
Jeff Davis	18, 39, 41, 42	4

Amphianthus pusillus Torrey (Scrophulariaceae) Endangered

Common Name: Amphianthus

Range: Piedmont of Ala., Ga., and S.C.

Plant Type: Annual aquatic herb



Description: This is a diminutive plant which can easily be overlooked. It has both floating and submerged leaves. The floating leaves are oppositely arranged on the stem, ovate, 4-8 mm. long, 3-5 mm. wide, and are attached to the submerged leaves by delicate, lax stems. The submerged leaves are arranged in a basal rosette, lanceolate, and less than 1 cm. long. The flowers are small, white, inconspicuous, and are found both among the submerged basal leaves and in between the floating surface leaves. The fruit is a small capsule, 2-3 mm. broad, and 1 mm. long. Flowering period: Mar.-Apr.; fruiting period: Apr.-May.

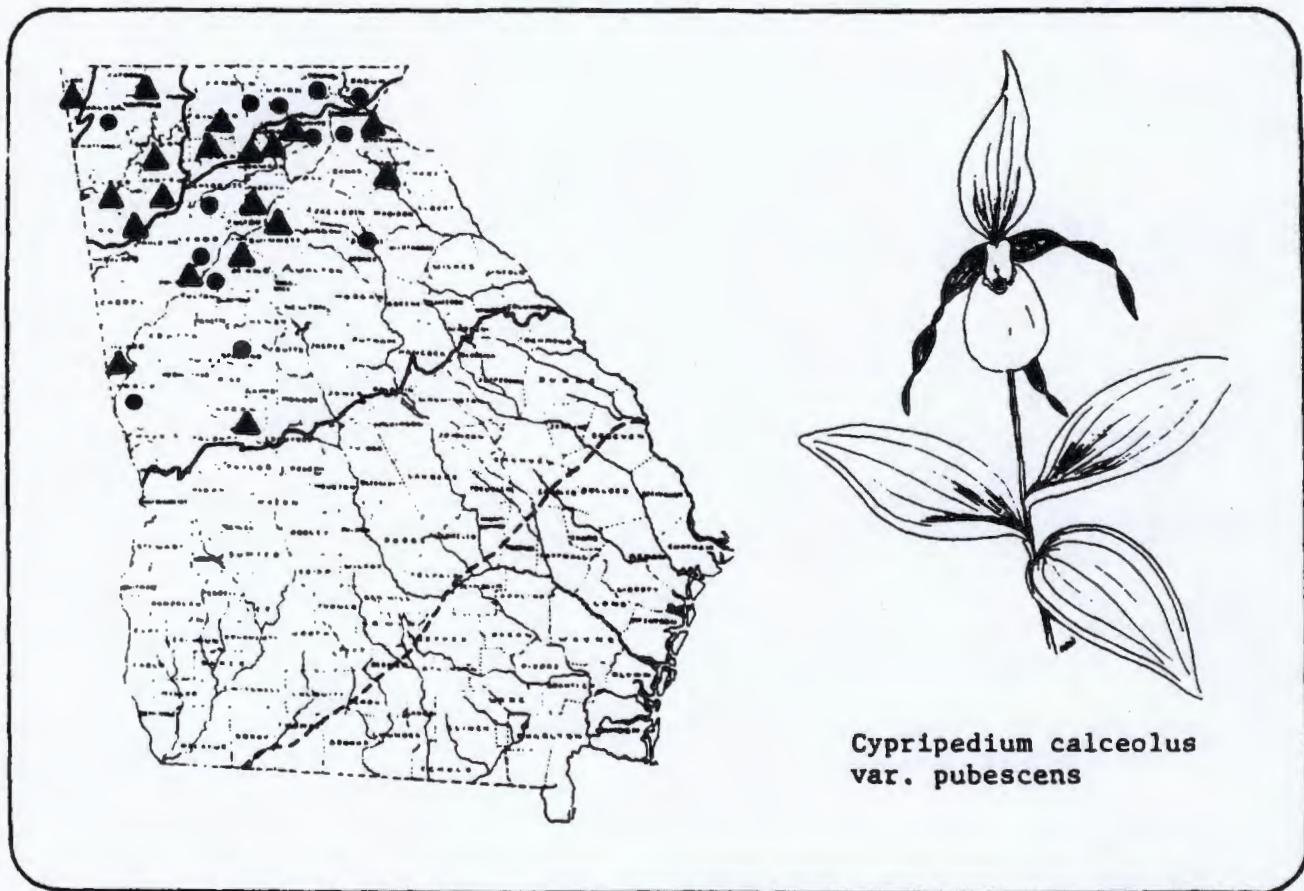
Habitat: Restricted to the shallow, flat-bottomed depression pools of granite outcrops. These pools are usually less than a foot in depth and are completely dry in the summer after the spring rains have evaporated.

Selected Reference(s):

Duncan, W.H. and L.E. Foote. 1975. Wildflowers of the Southeastern United States. pg. 172. Univ. of Ga. Press, Athens, Ga.

Radford, A.E., H.E. Ahles, and C.R. Bell. 1964. Manual of the Vascular Flora of the Carolinas. pg. 937. Univ. of N.C. Press, Chapel Hill, N.C.

Cypripedium calceolus var. pubescens* (Willd.) Correll (Orchidaceae) Threatened
Common Names: Golden Slipper, and Yellow Lady's-Slipper
Range: North Ga., west to Ariz., and north to Canada
Plant Type: Perennial herb



Cypripedium calceolus
var. pubescens

Description: Yellow Lady's-Slipper is a showy plant up to 70 cm. tall. The 3-5 leaves are alternately arranged on the stem, prominently veined, green above and beneath, and up to 20 cm. long and 10 cm. wide. The 1 to 2 flowers are terminally disposed, have 2 green twisted petals and a yellow colored "shoe" (lip petal), which is veined and purple spotted in the center. The fruit is a capsule that is conspicuously covered with small hairs, and is up to 5 cm. long. Flowering period: Apr.-June; fruiting period: May-July.

Habitat: Primarily found in rich, moist, hardwood coves and forests.

Selected Reference(s):

Duncan, W.H. and L.E. Foote. 1975. Wildflowers of the Southeastern United States. pg. 269. Univ. of Ga. Press, Athens, Ga.

Radford, A.E., H.E. Ahles, and C.R. Bell. 1964. Manual of the Vascular Flora of the Carolinas. pg. 333. Univ. of N.C. Press, Chapel Hill, N.C.

* = C. pubescens Willd., and C. parviflorum Salis.

Schisandra glabra (Brickell) Rehder* (Schisandraceae) Threatened
Common Names: Bay Star-vine, Schisandra, and Wild Sarsaparilla
Range: Ala., Ark., Fla., Ga., La., Miss., N.C., S.C., and Tenn.
Plant Type: Woody vine



Schisandra glabra

Description: This is a twining vine which can easily be confused with Climbing Hydrangea (Decumaria barbara), which is quite common. The difference between the two species is that Decumaria barbara has opposite leaves and climbs by means of aerial roots, and Schisandra glabra has alternate leaves and twines. The leaves of S. glabra are up to 15 cm. long and 6 cm. wide, have sparsely toothed margins, and are sweet smelling when crushed. S. glabra has both male and female flowers on the same plant (monoecious). The 9-12 petals are 5-8 mm. long, and crimson colored. The fruit is an aggregate of red berries on an elongate spike. Flowering period: May-June; fruiting period: July-Aug.

Habitat: Typically found twining over subcanopy and understory trees and shrubs in rich, alluvial woods.

Selected Reference(s):

Duncan, W.H. 1975. Woody Vines of the Southeastern United States. pg. 19. Univ. of Ga. Press, Athens, Ga.

Radford, A.E., H.E. Ahles, and C.R. Bell. 1964. Manual of the Vascular Flora of the Carolinas. pg. 476. Univ. of N.C. Press, Chapel Hill, N.C.

* = Schizandra coccinea Michx.

Potential Hazardous Waste Site Preliminary Assessment Form						Identification	
						State: GA	CERCLIS Number:
						CERCLIS Discovery Date:	
1. General Site Information							
Name: Fairburn Road Dump			Street Address: 4012 Riverside Dr.				
City: Douglasville			State: GA	Zip Code: 30134	County: Douglas	Co. Code: 097	Cont. Dist: 6
Latitude: 33° 41' 44.0"		Longitude: 84° 38' 00.0"	Approximate Area of Site: 79 Acres _____ Square Ft			Status of Site: <input type="checkbox"/> Active <input type="checkbox"/> Not Specified <input checked="" type="checkbox"/> Inactive <input type="checkbox"/> NA (GW plume, etc.)	
2. Owner/Operator Information							
Owner: See Attachment			Operator:				
Street Address:			Street Address:				
City:			City:				
State:	Zip Code:	Telephone: ()	State:	Zip Code:	Telephone: ()		
Type of Ownership: <input checked="" type="checkbox"/> Private <input type="checkbox"/> Federal Agency Name _____ <input type="checkbox"/> State <input type="checkbox"/> Indian			How Initially Identified: <input checked="" type="checkbox"/> Citizen Complaint <input type="checkbox"/> PA Petition <input type="checkbox"/> State/Local Program <input type="checkbox"/> RCRA/CERCLA Notification			<input type="checkbox"/> Federal Program <input type="checkbox"/> Incidental <input type="checkbox"/> Not Specified <input type="checkbox"/> Other _____	
3. Site Evaluator Information							
Name of Evaluator: Billy Hendricks	Agency/Organization: Ga. DNR- EPD			Date Prepared: 3-31-93			
Street Address: 205 Butler St. Suite 1154	City: Atlanta			State: GA			
Name of EPA or State Agency Contact: Jennifer Kaduck	Street Address:			Same as evaluator			
City:	State:	Telephone: 1404 656-2833					
4. Site Disposition (for EPA use only)							
Emergency Response/Removal Assessment Recommendation: <input type="checkbox"/> Yes <input type="checkbox"/> No Date: _____	CERCLIS Recommendations: <input type="checkbox"/> Higher Priority SI <input type="checkbox"/> Lower Priority SI <input type="checkbox"/> NFRAP <input type="checkbox"/> RCRA <input type="checkbox"/> Other _____ Date: _____			Signature: Name (typed): Position:			



Potential Hazardous Waste Site
Preliminary Assessment Form - Page 2 of 4

CERCLIS Number:

5. General Site Characteristics

Predominant Land Use Within 1 Mile of Site (check all that apply):	<input type="checkbox"/> Industrial	<input type="checkbox"/> Agricultural	<input type="checkbox"/> DOI
	<input checked="" type="checkbox"/> Mining	<input type="checkbox"/> Other Federal Facility	
	<input checked="" type="checkbox"/> Residential	<input type="checkbox"/> DOD	
	<input type="checkbox"/> Forest/Fields	<input type="checkbox"/> DOE	<input type="checkbox"/> Other _____

Type of Site Operations (check all that apply):

- Manufacturing (must check subcategory)
 - Lumber and Wood Products
 - Inorganic Chemicals
 - Plastic and/or Rubber Products
 - Paints, Varnishes
 - Industrial Organic Chemicals
 - Agricultural Chemicals
 - (e.g., pesticides, fertilizers)
 - Miscellaneous Chemical Products (e.g., adhesives, explosives, ink)
- Primary Metals
- Metal Casting, Plating, Brightening
- Fabricated Structural Metal Products
- Electronic Equipment
- Other Manufacturing
- Mining
- Metals
- Coal
- Oil and Gas
- Non-metallic Minerals

Site Setting:	<input type="checkbox"/> Urban
	<input type="checkbox"/> Suburban
	<input checked="" type="checkbox"/> Rural
	<input checked="" type="checkbox"/> Unknown

Years of Operation:
Beginning Year _____
Ending Year _____

Waste Disposition Authorized By:	<input type="checkbox"/> Present Owner
	<input type="checkbox"/> Former Owner
	<input type="checkbox"/> Present & Former Owner
	<input type="checkbox"/> Unauthorized
	<input checked="" type="checkbox"/> Unknown

Waste Accessible to the Public:
 Yes
 No

Distance to Nearest Dwelling,
School, or Workplace:
100 Feet

6. Waste Characteristics Information

Source Type: (check all that apply)	Source Waste Quantity: (include units)	Time ^a :	General Type of Waste (check all that apply)
<input type="checkbox"/> Landfill	_____	_____	<input type="checkbox"/> Metals
<input type="checkbox"/> Surface Impoundment	_____	_____	<input type="checkbox"/> Pesticides/Herbicides
<input type="checkbox"/> Drums	_____	_____	<input type="checkbox"/> Organics
<input type="checkbox"/> Tanks and Non-Drum Containment	_____	_____	<input type="checkbox"/> Inorganics
<input type="checkbox"/> Chemical Waste Pits	_____	_____	<input type="checkbox"/> Solvents
<input checked="" type="checkbox"/> Scrap Metal or Junk Pits	_____	_____	<input type="checkbox"/> Paint/Fixatives
<input type="checkbox"/> Tailings Pile	_____	_____	<input type="checkbox"/> Laboratory/Hospital Waste
<input type="checkbox"/> Truck Pits (open dump)	_____	_____	<input type="checkbox"/> Explosives
<input type="checkbox"/> Land Treatment	_____	_____	<input type="checkbox"/> Radioactive Waste
<input type="checkbox"/> Contaminated Ground Water Plumes	_____	_____	<input type="checkbox"/> Construction/Demolition
(unidentified sources)	_____	_____	<input type="checkbox"/> Waste
<input type="checkbox"/> Contaminated Surface Water/Sediment	_____	_____	<input type="checkbox"/> Other _____
(unidentified sources)	_____	_____	
<input type="checkbox"/> Contaminated Soil	_____	_____	
<input type="checkbox"/> Other _____	_____	_____	
<input checked="" type="checkbox"/> No Sources	_____	_____	

Physical State of Waste as Deposited (check all that apply):
 Solid Sludge Powder
 Liquid Gas

^a C = Continuous, W = Wastetime, V = Volume, A = Area



Potential Hazardous Waste Site
Preliminary Assessment Form - Page 3 of 4

CERCLIS Number:

7. Ground Water Pathway

Is Ground Water Used for Drinking Water Within 4 Miles: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Is There a Suspected Release to Ground Water: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	List Secondary Target Population Served by Ground Water Withdrawn From:	
		0 - 1/4 Mile	6
Type of Drinking Water Wells Within 4 Miles (check all that apply): <input type="checkbox"/> Municipal <input checked="" type="checkbox"/> Private <input type="checkbox"/> None	Have Primary Target Drinking Water Wells Been Identified: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	> 1/4 - 1/2 Mile	200
		> 1/2 - 1 Mile	63
If Yes, Enter Primary Target Population: <u>6</u> People		> 1 - 2 Miles	206
		> 2 - 3 Miles	452
		> 3 - 4 Miles	721
		Total Within 4 Miles	1469

8. Surface Water Pathway

Type of Surface Water Draining Site and 15 Miles Downstream (check all that apply): <input type="checkbox"/> Stream <input checked="" type="checkbox"/> River <input type="checkbox"/> Pond <input type="checkbox"/> Lake <input type="checkbox"/> Bay <input type="checkbox"/> Ocean <input type="checkbox"/> Other _____	Shortest Overland Distance From Any Source to Surface Water: <u>0</u> Feet <u>0</u> Miles
Is There a Suspected Release to Surface Water: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Site is Located in: <input checked="" type="checkbox"/> Annual - 10 yr Floodplain <input type="checkbox"/> > 10 yr - 100 yr Floodplain <input type="checkbox"/> > 100 yr - 500 yr Floodplain <input type="checkbox"/> > 500 yr Floodplain
Drinking Water Intakes Located Along the Surface Water Migration Path: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	List All Secondary Target Drinking Water Intakes: Name _____ Water Body _____ Flow (cfs) _____ Population Served _____ <u>Doy R.</u> _____ <u>3.9*</u> _____ <u>Bell Cr.</u> _____ <u>3.9*</u> _____ * Combined total _____ Total within 15 Miles <u>83,600</u>
Have Primary Target Drinking Water Intakes Been Identified: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
If Yes, Enter Population Served by Primary Target Intakes: <u> </u> People	
Fisheries Located Along the Surface Water Migration Path: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	List All Secondary Target Fisheries: Water Body/Fishery Name _____ Flow (cfs) _____ <u>N/A</u> _____ _____
Have Primary Target Fisheries Been Identified: <input type="checkbox"/> Yes <input type="checkbox"/> No	



8. Surface Water Pathway (continued)

APPENDIX A

OMB Approval Number: 2050-0095
Approved for Use Through: 1/92

PA Scoresheets

Site Name: Fairburn Rd. Dump

Investigator: Billy Hendricks

CERCLIS ID No.: GAD 984 295196

Agency/Organization: Ga. DNR - EPD

Street Address: Fairburn Rd. + Riverside Dr.

Street Address: 205 Butler St.

City/State/Zip: Douglasville, GA 30134

City/State/Zip: Atlanta, GA 30334

Date: 3-31-93

GENERAL INFORMATION**Site Description and Operational History:**

The Fairburn Road Dump site is located approximately 8.5 miles east of Douglasville on Fairburn Road, Georgia Highway 166, as shown on Figure 1. The site is bordered to the south by Fairburn Road, to the east by the Chattahoochee River, to the north by mixed residential-commercial property and the Douglasville/Douglas County Water and Sewer Authority Water Treatment Plant, and to the west by King Road.

The site occupies approximately 79 acres on the west bank of the Chattahoochee River. A substantial portion of the property is comprised of flood plain along a meander of the river. The site was originally intended as a subdivision, Riverside Gardens. The parcel comprises 95 separate lots, ranging in size from $\frac{1}{4}$ acre to over $2\frac{1}{2}$ acres. Of these 95 lots, approximately 75 are included in the study area. More than fifty owners are currently recorded for these lots, some of which have been recombined to form larger lots.

The site is moderately developed, with numerous permanent improvements, including houses, warehouse/office structures, open storage areas, and trailers in abundance. Some of this cleared area appears to have been used in dredging operations for sand and gravel as far back as the first set of aerial photographs in 1968. The site was "discovered" June 21, 1991 based on a complaint filed with the U. S. EPA Region IV. Based on file review and the site visit, the site has not been operated as a disposal facility.

Probable Substances of Concern:
(Previous investigations, analytical data)

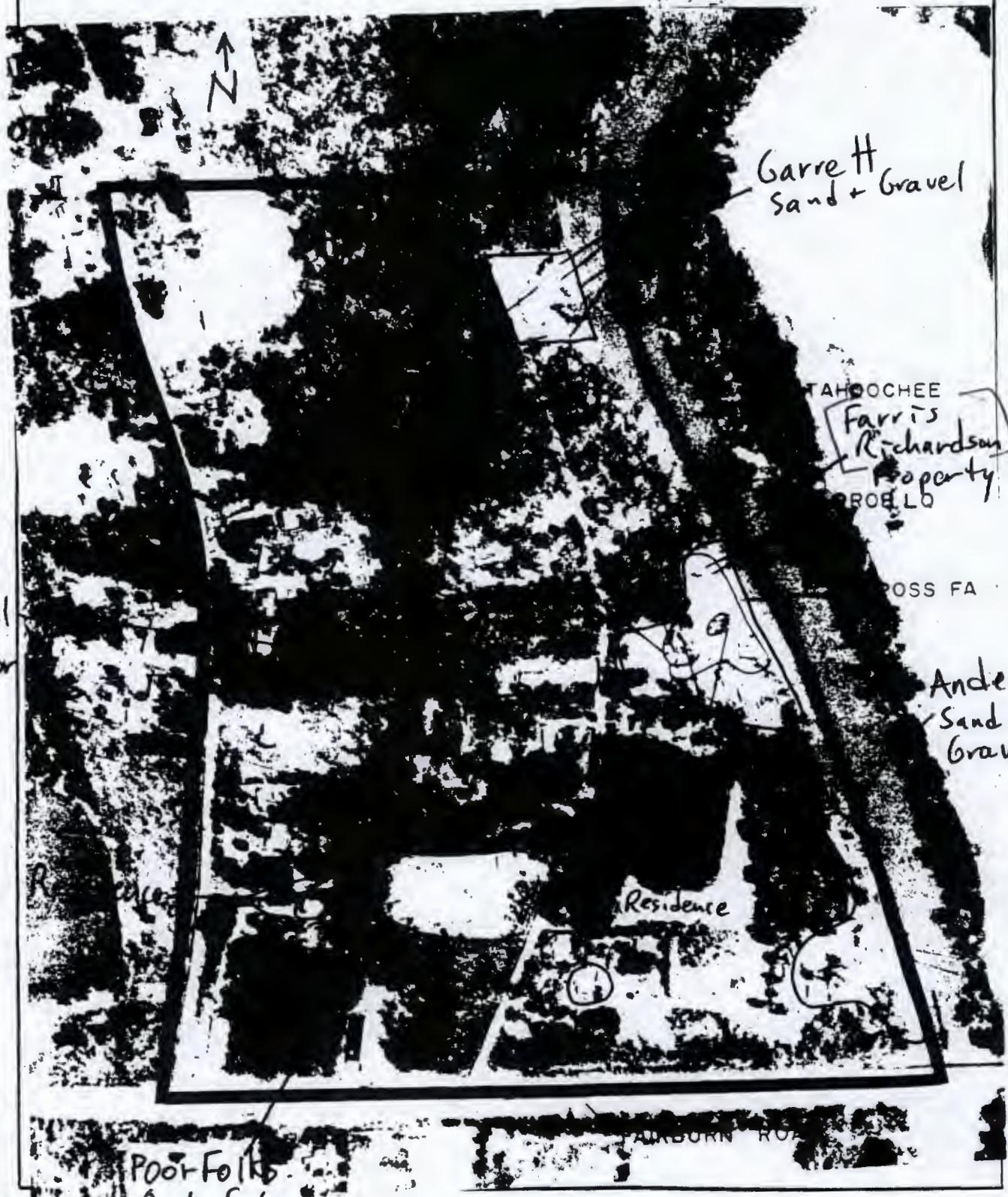
That portion of the site used as a junkyard is the only currently visible source of contaminants: possible substances of concern include used motor oil, antifreeze, fuel, and bearing metals. Evidence of previous waste disposal at the site is limited to reports filed with USEPA Region IV by residents of the area. However, it must be noted that conversations with the original complainant indicate that the Fairburn Road Dump Site is not the location she intended in her complaint.

Routine operations of any land-disturbing activities are limited to dredging the Chattahoochee for sand and gravel. There are currently two active and one inactive dredging operations.

GENERAL INFORMATION (continued)

Site Sketch:

(Show all pertinent features, indicate sources and closest targets, indicate north)



SOURCE EVALUATION

Source No.: 1	Source Name: Poor Folks	Source Waste Quantity (WQ) Calculations:
Source Description: Auto salvage yard Possible contaminated soil		Approx. 2 acres in area. Assume soil contaminated 1" deep. $2\text{ac} \times \frac{1}{12} \times 43560 \times \frac{1}{27} = 268 \text{ yd}^3$

Source No.:	Source Name:	Source Waste Quantity (WQ) Calculations:
Source Description:		

Source No.:	Source Name:	Source Waste Quantity (WQ) Calculations:
Source Description:		

Site WC:
18

Site name:
Date:

PA TABLE 1: WASTE CHARACTERISTICS (WC) SCORES

PA Table 1a: WC Scores for Single Source Sites and Formulas
for Multiple Source Sites

TIER	SOURCE TYPE	SINGLE SOURCE SITES (assigned WC scores)			MULTIPLE SOURCE SITES Formula for Assigning Source WC Values
		WC = 18	WC = 32	WC = 100	
CONT	N/A	$\leq 100 \text{ lb}$	$> 100 \text{ to } 10,000 \text{ lb}$	$> 10,000 \text{ lb}$	$D \rightarrow 1$
WASTE	N/A	$\leq 500,000 \text{ lb}$	$> 500,000 \text{ to } 50 \text{ million lb}$	$> 50 \text{ million lb}$	$D \rightarrow 5,000$
VOLUME	Landfill	$\leq 6.75 \text{ million ft}^3$ $\leq 250,000 \text{ yd}^3$	$> 6.75 \text{ million to } 675 \text{ million ft}^3$ $> 250,000 \text{ to } 25 \text{ million yd}^3$	$> 675 \text{ million ft}^3$ $> 25 \text{ million yd}^3$	$\text{ft}^3 \rightarrow 67,500$ $\text{yd}^3 \rightarrow 2,500$
	Surface impoundment	$\leq 6.750 \text{ ft}^3$ $\leq 250 \text{ yd}^3$	$> 6.750 \text{ to } 675,000 \text{ ft}^3$ $> 250 \text{ to } 25,000 \text{ yd}^3$	$> 675,000 \text{ ft}^3$ $> 25,000 \text{ yd}^3$	$\text{ft}^3 \rightarrow 67.5$ $\text{yd}^3 \rightarrow 2.5$
	Drums	$\leq 1,000 \text{ drums}$	$> 1,000 \text{ to } 100,000 \text{ drums}$	$> 100,000 \text{ drums}$	$\text{drums} \rightarrow 10$
	Tanks and non-drum containers	$\leq 50,000 \text{ gallons}$	$> 50,000 \text{ to } 5 \text{ million gallons}$	$> 5 \text{ million gallons}$	$\text{gallons} \rightarrow 500$
	Contaminated soil	$\leq 6.75 \text{ million ft}^3$ $\leq 250,000 \text{ yd}^3$	$> 6.75 \text{ million to } 675 \text{ million ft}^3$ $> 250,000 \text{ to } 25 \text{ million yd}^3$	$> 675 \text{ million ft}^3$ $> 25 \text{ million yd}^3$	$\text{ft}^3 \rightarrow 67,500$ $\text{yd}^3 \rightarrow 2,500$
	Pile	$\leq 6.750 \text{ ft}^3$ $\leq 250 \text{ yd}^3$	$> 6.750 \text{ to } 675,000 \text{ ft}^3$ $> 250 \text{ to } 25,000 \text{ yd}^3$	$> 675,000 \text{ ft}^3$ $> 25,000 \text{ yd}^3$	$\text{ft}^3 \rightarrow 67.5$ $\text{yd}^3 \rightarrow 2.5$
	Other	$\leq 6.750 \text{ ft}^3$ $\leq 250 \text{ yd}^3$	$> 6.750 \text{ to } 675,000 \text{ ft}^3$ $> 250 \text{ to } 25,000 \text{ yd}^3$	$> 675,000 \text{ ft}^3$ $> 25,000 \text{ yd}^3$	$\text{ft}^3 \rightarrow 67.5$ $\text{yd}^3 \rightarrow 2.5$
AREA	Landfill	$\leq 340,000 \text{ ft}^2$ $\leq 7.8 \text{ acres}$	$> 340,000 \text{ to } 34 \text{ million ft}^2$ $> 7.8 \text{ to } 780 \text{ acres}$	$> 34 \text{ million ft}^2$ $> 780 \text{ acres}$	$\text{ft}^2 \rightarrow 3,400$ $\text{acres} \rightarrow 0.078$
	Surface impoundment	$\leq 1,300 \text{ ft}^2$ $\leq 0.029 \text{ acres}$	$> 1,300 \text{ to } 130,000 \text{ ft}^2$ $> 0.029 \text{ to } 2.8 \text{ acres}$	$> 130,000 \text{ ft}^2$ $> 2.8 \text{ acres}$	$\text{ft}^2 \rightarrow 13$ $\text{acres} \rightarrow 0.00029$
	Contaminated soil	$\leq 3.4 \text{ million ft}^2$ $\leq 78 \text{ acres}$	$> 3.4 \text{ million to } 340 \text{ million ft}^2$ $> 78 \text{ to } 7,800 \text{ acres}$	$> 340 \text{ million ft}^2$ $> 7,800 \text{ acres}$	$\text{ft}^2 \rightarrow 34,000$ $\text{acres} \rightarrow 0.78$
	Pile*	$\leq 1,300 \text{ ft}^2$ $\leq 0.029 \text{ acres}$	$> 1,300 \text{ to } 130,000 \text{ ft}^2$ $> 0.029 \text{ to } 2.8 \text{ acres}$	$> 130,000 \text{ ft}^2$ $> 2.8 \text{ acres}$	$\text{ft}^2 \rightarrow 13$ $\text{acres} \rightarrow 0.00029$
	Land treatment	$\leq 27,000 \text{ ft}^2$ $\leq 0.82 \text{ acres}$	$> 27,000 \text{ to } 2.7 \text{ million ft}^2$ $> 0.82 \text{ to } 62 \text{ acres}$	$> 2.7 \text{ million ft}^2$ $> 62 \text{ acres}$	$\text{ft}^2 \rightarrow 270$ $\text{acres} \rightarrow 0.0062$

1 ton = 2,000 lb = 1 yd³ = 4 drums = 200 gallons

* Use area of land surface under pile, not surface area of pile.

PA Table 1b: WC Scores for Multiple Source Sites

WC Total	WC Score
> 0 to 100	18
> 100 to 10,000	32
> 10,000	100

**GROUND WATER PATHWAY
GROUND WATER USE DESCRIPTION**

**Describe Ground Water Use Within 4-miles of the Site:
(Describe stratigraphy, information on aquifers, municipal and/or private wells)**

Calculations for Drinking Water Populations Served by Ground Water:

GROUND WATER PATHWAY CRITERIA LIST											
SUSPECTED RELEASE						PRIMARY TARGETS					
Y	N	U	Y	N	U	Y	N	U	Y	N	U
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are sources poorly contained?			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is any drinking water well nearby?		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is the source a type likely to contribute to ground water contamination (e.g., wet lagoon)?			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Has any nearby drinking water well been closed?		
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is waste quantity particularly large?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Has any nearby drinking water user reported foul-tasting or foul-smelling water?		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is precipitation heavy?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Does any nearby well have a large drawdown or high production rate?		
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the infiltration rate high?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is any drinking water well located between the site and other wells that are suspected to be exposed to a hazardous substance?		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is the site located in an area of karst terrain?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Does analytical or circumstantial evidence suggest contamination at a drinking water well?		
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the subsurface highly permeable or conductive?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Does any drinking water well warrant sampling?		
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is drinking water drawn from a shallow aquifer?			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other criteria? _____		
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Are suspected contaminants highly mobile in ground water?			<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	PRIMARY TARGET(S) IDENTIFIED?		
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Does analytical or circumstantial evidence suggest ground water contamination?			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
<input type="checkbox"/> Other criteria? _____											
<input checked="" type="checkbox"/> SUSPECTED RELEASE?											
Summarize the rationale for Suspected Release (attach an additional page if necessary):						Summarize the rationale for Primary Targets (attach an additional page if necessary):					
No visible contamination noted during site visit						Municipal water service in place at each location in site area.					

Site name:
Date:

GROUND WATER PATHWAY SCORESHEET

Pathway Characteristics	
Do you suspect a release (see Ground Water Pathway Criteria List, page 7)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Is the site located in karst terrain?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Depth to aquifer:	210 ft
Distance to the nearest drinking water well:	100 ft

LIKELIHOOD OF RELEASE

1. SUSPECTED RELEASE: If you suspect a release to ground water (see page 7), assign a score of 550. Use only column A for this pathway.
2. NO SUSPECTED RELEASE: If you do not suspect a release to ground water, and the site is in karst terrain or the depth to aquifer is 70 feet or less, assign a score of 500; otherwise, assign a score of 340. Use only column B for this pathway.

A	B	Reference
Suspected Release	No Suspected Release	
550		
	500	500

LR = 500

TARGETS

3. PRIMARY TARGET POPULATION: Determine the number of people served by drinking water wells that you suspect have been exposed to a hazardous substance from the site (see Ground Water Pathway Criteria List, page 7). people x 10 =
4. SECONDARY TARGET POPULATION: Determine the number of people served by drinking water wells that you do NOT suspect have been exposed to a hazardous substance from the site, and assign the total population score from PA Table 2.
Are any wells part of a blended system? Yes No
If yes, attach a page to show apportionment calculations.
5. NEAREST WELL: If you have identified a primary target population for ground water, assign a score of 50; otherwise, assign the Nearest Well score from PA Table 2. If no drinking water wells exist within 4 miles, assign a score of zero.
6. WELLHEAD PROTECTION AREA (WHPA): If any source lies within or above a WHPA, or if you have identified any primary target well within a WHPA, assign a score of 20; assign 5 if neither condition holds but a WHPA is present within 4 miles; otherwise assign zero.
7. RESOURCES

		18
		20
		0
		5
T =		43

WASTE CHARACTERISTICS

8. A. If you have identified any primary target for ground water, assign the waste characteristics score calculated on page 4, or a score of 32, whichever is GREATER; do not evaluate part B of this factor.
- B. If you have NOT identified any primary target for ground water, assign the waste characteristics score calculated on page 4.

140 or 32		
140 or 32		

WC = 18

GROUND WATER PATHWAY SCORE:

 $\frac{LR \times T \times WC}{82.500}$

(addition to a maximum of 100)

4.7

PA TABLE 2: VALUES FOR SECONDARY GROUND WATER TARGET POPULATIONS

PA Table 2a: Non-Karst Aquifers

Distance from Site	Population	Nearest Well (choose highest)	Population Served by Wells Within Distance Category										Population Value
			1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	Greater than 100,000	
0 to ½ mile	6	20	(1)	2	5	16	52	163	521	1,633	5,214	16,325	1
> ½ to ¾ mile	20	18	1	(1)	3	10	32	101	323	1,012	3,233	10,121	1
> ¾ to 1 mile	63	9	1	1	(2)	5	17	52	167	522	1,668	5,224	2
> 1 to 2 miles	206	6	1	1	1	(3)	9	29	94	294	939	2,938	3
> 2 to 3 miles	452	3	1	1	1	2	(7)	21	68	212	678	2,122	7
> 3 to 4 miles	721	2	1	1	1	1	(4)	13	42	131	417	1,306	4
Nearest Well = 20													Score = 18

PA Table 2b: Karst Aquifers

Distance from Site	Population	Nearest Well (use 20 for karst)	Population Served by Wells Within Distance Category										Population Value
			1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	Greater than 100,000	
0 to ½ mile	—	20	1	2	5	16	52	163	521	1,633	5,214	16,325	—
> ½ to ¾ mile	—	20	1	1	3	10	32	101	323	1,012	3,233	10,121	—
> ¾ to 1 mile	—	20	1	1	3	8	26	82	261	816	2,607	8,162	—
> 1 to 2 miles	—	20	1	1	3	8	26	82	261	816	2,607	8,162	—
> 2 to 3 miles	—	20	1	1	3	8	26	82	261	816	2,607	8,162	—
> 3 to 4 miles	—	20	1	1	3	8	26	82	261	816	2,607	8,162	—
Nearest Well = —													Score = —

Date:

**SURFACE WATER PATHWAY
MIGRATION ROUTE SKETCH**

Surface Water Migration Route Sketch:

(include runoff routes, probable point of entry, 15-mile target distance limit, intakes, fisheries, and sensitive environments)

SURFACE WATER PATHWAY CRITERIA LIST									
SUSPECTED RELEASE					PRIMARY TARGETS				
Y	N	U			Y	N	U		
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	e	o	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	e	o
s	k		n		s	k		n	
<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Is surface water nearby?					<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Is any target nearby? If yes:				
<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Is waste quantity particularly large?					<input checked="" type="checkbox"/> Drinking water intake				
<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Is the drainage area large?					<input checked="" type="checkbox"/> Fishery				
<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Is rainfall heavy?					<input type="checkbox"/> Sensitive environment				
<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Is the infiltration rate low?					<input type="checkbox"/> <input checked="" type="checkbox"/> Has any intake, fishery, or recreational area been closed?				
<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Are sources poorly contained or prone to runoff or flooding?					<input type="checkbox"/> <input checked="" type="checkbox"/> Does analytical or circumstantial evidence suggest surface water contamination at or downstream of a target?				
<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Is a runoff route well defined (e.g., ditch or channel leading to surface water)?					<input type="checkbox"/> <input checked="" type="checkbox"/> Does any target warrant sampling? If yes:				
<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Is vegetation stressed along the probable runoff route?					<input type="checkbox"/> Drinking water intake				
<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Are sediments or water unnaturally discolored?					<input type="checkbox"/> Fishery				
<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Is wildlife unnaturally absent?					<input type="checkbox"/> Sensitive environment				
<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Has deposition of waste into surface water been observed?					<input type="checkbox"/> Other criteria? _____				
<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Is ground water discharge to surface water likely?					<input type="checkbox"/> PRIMARY INTAKE(S) IDENTIFIED?				
<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Does analytical or circumstantial evidence suggest surface water contamination?					<input type="checkbox"/> PRIMARY FISHERY(IES) IDENTIFIED?				
<input type="checkbox"/> <input type="checkbox"/> Other criteria? _____					<input type="checkbox"/> PRIMARY SENSITIVE ENVIRONMENT(S) IDENTIFIED?				
<input type="checkbox"/> <input checked="" type="checkbox"/> SUSPECTED RELEASE?									
Summarize the rationale for Suspected Release (attach an additional page if necessary):					Summarize the rationale for Primary Targets (attach an additional page if necessary):				

**SURFACE WATER PATHWAY
LIKELIHOOD OF RELEASE AND DRINKING WATER THREAT SCORESHEET**

Pathway Characteristics																	
Do you suspect a release (see Surface Water Pathway Criteria List, page 11)? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Distance to surface water: 100 ft Flood frequency: 10 yrs What is the downstream distance to the nearest drinking water intake? 8 miles Nearest fishery? _____ miles Nearest sensitive environment? _____ miles																	
LIKELIHOOD OF RELEASE 1. SUSPECTED RELEASE: If you suspect a release to surface water (see page 11), assign a score of 500. Use only column A for this pathway. 2. NO SUSPECTED RELEASE: If you do not suspect a release to surface water, use the table below to assign a score based on distance to surface water and flood frequency. Use only column B for this pathway.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">A</th> <th style="width: 50%;">B</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; padding: 2px;">Suspected Release</td> <td style="text-align: center; padding: 2px;">No Suspected Release</td> </tr> <tr> <td style="text-align: center; padding: 2px;">500</td> <td style="text-align: center; padding: 2px;">500</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 2px;">(500, 100, 50) = 100</td> </tr> <tr> <td colspan="2" style="text-align: right; padding: 2px;">500</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">A</th> <th style="width: 50%;">B</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; padding: 2px;">LR -</td> <td style="text-align: center; padding: 2px;">500</td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 2px;">(500, 100, 50) = 100</td> </tr> </tbody> </table>	A	B	Suspected Release	No Suspected Release	500	500	(500, 100, 50) = 100		500		A	B	LR -	500	(500, 100, 50) = 100	
A	B																
Suspected Release	No Suspected Release																
500	500																
(500, 100, 50) = 100																	
500																	
A	B																
LR -	500																
(500, 100, 50) = 100																	

DRINKING WATER THREAT TARGETS

3. Record the water body type, flow (if applicable), and number of people served by each drinking water intake within the target distance limit. If there is no drinking water intake within the target distance limit, factors 4, 5, and 6 each receive zero scores.

Intake Name	Water Body Type	Flow	People Served
		cfs	
		cfs	
		cfs	

4. PRIMARY TARGET POPULATION: If you suspect any drinking water intake listed above has been exposed to a hazardous substance from the site (see Surface Water Pathway Criteria List, page 11), list the intake name(s) and calculate the factor score based on the total population served.

_____ people × 10 =

5. SECONDARY TARGET POPULATION: Determine the number of people served by drinking water intakes that you do NOT suspect have been exposed to a hazardous substance from the site, and assign the total population score from PA Table 3.

Are any intakes part of a blended system? Yes No
 If yes, attach a page to show apportionment calculations.

6. NEAREST INTAKE: If you have identified a primary target population for the drinking water threat (factor 4), assign a score of 50; otherwise, assign the Nearest Intake score from PA Table 3. If no drinking water intake exists within the target distance limit, assign a score of zero.

7. RESOURCES

A	B
5	5
(50, 100, 50) = 50	(50, 100, 50) = 50
5	0
(50, 100, 50) = 50	(50, 100, 50) = 50
10	10

PA TABLE 3: VALUES FOR SECONDARY SURFACE WATER TARGET POPULATIONS

Surface Water Body Flow (see PA Table 4)	Population	Nearest Intake (choose highest)	Population Served by Intakes Within Flow Category												Population Value
			1	31	101	301	1,001	3,001	10,001	30,001	100,001	300,001	Greater than 1,000,000		
			to 50	50 to 100	100 to 300	300 to 1,000	1,000 to 3,000	3,000 to 10,000	10,000 to 30,000	30,000 to 100,000	100,000 to 300,000	300,000 to 1,000,000	than 1,000,000		
< 10 cfs	—	20	2	6	16	52	163	521	1,633	5,214	16,326	52,136	163,246	—	
10 to 100 cfs	—	2	1	1	2	6	16	52	163	521	1,633	5,214	16,326	—	
> 100 to 1,000 cfs	—	1	0	0	1	1	2	6	16	52	163	521	1,633	—	
> 1,000 to 10,000 cfs	83600	0	0	0	0	0	1	1	2	5	16	52	163	5	
> 10,000 cfs or Great Lakes	—	0	0	0	0	0	0	0	1	1	2	5	16	—	
3-mile Mixing Zone	—	10	1	3	8	26	82	261	816	2,607	8,162	26,066	81,663	—	
Nearest Intake = 0															Score = 5

PA TABLE 4: SURFACE WATER TYPE / FLOW CHARACTERISTICS WITH DILUTION WEIGHTS FOR SECONDARY SURFACE WATER SENSITIVE ENVIRONMENTS

Type of Surface Water Body			Dilution Weight
Water Body Type	OR	Flow	
minimal stream		< 10 cfs	1
small to moderate stream		10 to 100 cfs	0.1
moderate to large stream		> 100 to 1,000 cfs	N/A
large stream to river		> 1,000 to 10,000 cfs	N/A
large river		> 10,000 cfs	N/A
3-mile mixing zone of quiet flowing streams or rivers		10 cfs or greater	N/A
coastal tidal water (harbors, sounds, bays, etc.), ocean, or Great Lakes		N/A	N/A

SURFACE WATER PATHWAY (continued)
HUMAN FOOD CHAIN THREAT SCORESHEET

LIKELIHOOD OF RELEASE

Enter Surface Water Likelihood of Release score from page 12.

A	B
Contaminated Release Score	No Contaminated Release Score
	500

Reference

HUMAN FOOD CHAIN THREAT TARGETS

8. Record the water body type and flow (if applicable) for each fishery within the target distance limit. If there is no fishery within the target distance limit, assign a Targets score of 0 at the bottom of the page.

Fishery Name	Water Body Type	Flow
		cfs

9. PRIMARY FISHERIES: If you suspect any fishery listed above has been exposed to a hazardous substance from the site (see Surface Water Criteria List, page 11), assign a score of 300 and do not evaluate Factor 10. List the primary fisheries:
- _____
- _____

10. SECONDARY FISHERIES

- A. If you suspect a release to surface water and have identified a secondary fishery but no primary fishery, assign a score of 210.
- B. If you do not suspect a release, assign a Secondary Fisheries score from the table below using the lowest flow at any fishery within the target distance limit.

Lowest Flow	Secondary Fisheries Score
< 10 cfs	210
10 to 100 cfs	30
> 100 cfs, coastal tidal waters, oceans, or Great Lakes	12

T =	300	12
-----	-----	----

SURFACE WATER PATHWAY (continued)
ENVIRONMENTAL THREAT SCORESHEET

LIKELIHOOD OF RELEASE

Enter Surface Water Likelihood of Release score from page 12.

A	B
Suspended Release Score	No Suspended Release Score
	500

Reference**ENVIRONMENTAL THREAT TARGETS**

11. Record the water body type and flow (if applicable) for each surface water sensitive environment within the target distance limit (see PA Tables 4 and 5). If there is no sensitive environment within the target distance limit, assign a Targets score of 0 at the bottom of the page.

Environment Name	Water Body Type	Flow
		cfs

12. PRIMARY SENSITIVE ENVIRONMENTS: If you suspect any sensitive environment listed above has been exposed to a hazardous substance from the site (see Surface Water Criteria List, page 11), assign a score of 300 and do not evaluate factor 13. List the primary sensitive environments:
- _____
- _____

13. SECONDARY SENSITIVE ENVIRONMENTS: If sensitive environments are present, but none is a primary sensitive environment, evaluate Secondary Sensitive Environments based on flow.

- A. For secondary sensitive environments on surface water bodies with flows of 100 cfs or less, assign scores as follows, and do not evaluate part B of this factor:

Flow	Dilution Weight (PA Table 4)	Environment Type and Value (PA Tables 6 and 8)	Total
cfs	x	=	

Sum = 100 100

- B. If all secondary sensitive environments are located on surface water bodies with flows > 100 cfs, assign a score of 10.

T = 10

PA TABLE 5: SURFACE WATER AND AIR PATHWAY SENSITIVE ENVIRONMENTS VALUES

Sensitive Environment	Assigned Value
Critical habitat for Federally designated endangered or threatened species	100
Marine Sanctuary	
National Park	
Designated Federal Wilderness Area	
Ecologically important areas identified under the Coastal Zone Wilderness Act	
Sensitive Areas identified under the National Estuary Program or Near Coastal Water Program of the Clean Water Act	
Critical Areas Identified under the Clean Lakes Program of the Clean Water Act (subareas in lakes or entire small lakes)	
National Monument (air pathway only)	
National Seashore Recreation Area	
National Lakeshore Recreation Area	
Habitat known to be used by Federally designated or proposed endangered or threatened species	75
National Preserve	
National or State Wildlife Refuge	
Unit of Coastal Barrier Resource System	
Federal land designated for the protection of natural ecosystems	
Administratively Proposed Federal Wilderness Area	
Spawning areas critical for the maintenance of fish/shellfish species within a river system, bay, or estuary	
Migratory pathways and feeding areas critical for the maintenance of anadromous fish species in a river system	
Terrestrial areas utilized for breeding by large or dense aggregations of vertebrate animals (air pathway) or semi-aquatic foragers (surface water pathway)	
National river reach designated as Recreational	
Habitat known to be used by State designated endangered or threatened species	50
Habitat known to be used by a species under review as to its Federal endangered or threatened status	
Coastal Barrier (partially developed)	
Federally designated Scenic or Wild River	
State land designated for wildlife or game management	25
State designated Scenic or Wild River	
State designated Natural Area	
Particular areas, relatively small in size, important to maintenance of unique biotic communities	
State designated areas for protection/maintenance of aquatic life under the Clean Water Act	5
Wetlands	See PA Table 6 (Surface Water Pathway) or PA Table 8 (Air Pathway)

PA TABLE 6: SURFACE WATER PATHWAY WETLANDS FRONAGE VALUES

Total Length of Wetlands	Assigned Value
Less than 0.1 mile	0
0.1 to 1 mile	25
Greater than 1 to 2 miles	50
Greater than 2 to 3 miles	75
Greater than 3 to 4 miles	100
Greater than 4 to 8 miles	150
Greater than 8 to 12 miles	250
Greater than 12 to 16 miles	350
Greater than 16 to 20 miles	400
Greater than 20 miles	500

Site name:
Date:

SURFACE WATER PATHWAY (concluded)
WASTE CHARACTERISTICS, THREAT, AND PATHWAY SCORE SUMMARY

WASTE CHARACTERISTICS	A	B
	Suspected Release	No Suspected Release
14. A. If you have identified any primary target for surface water (pages 12, 14, or 16), assign the waste characteristics score calculated on page 4; or a score of 32, whichever is GREATER; do not evaluate part B of this factor.	1160 = 28	
B. If you have NOT identified any primary target for surface water, assign the waste characteristics score calculated on page 4.	1160L = 18	1160L = 18
WC =		18

SURFACE WATER PATHWAY THREAT SCORES

Threat	Likelihood of Release (LR) Score (from page 12)	Targets (T) Score (pages 12, 14, 16)	Pathway Waste Characteristics (WC) Score (determined above)	Threat Score $LR \times T \times WC$ / 62,500
Drinking Water	500	10	18	1.1 <small>Equivalent to a probability of 10%</small>
Human Food Chain	500	12	18	1.3 <small>Equivalent to a probability of 10%</small>
Environmental	500	10	18	1.1 <small>Equivalent to a probability of 10%</small>

SURFACE WATER PATHWAY SCORE
(Drinking Water Threat + Human Food Chain Threat + Environmental Threat)

Equivalent to a probability of 10%

3.5

Site name:
Date:

SOIL EXPOSURE PATHWAY CRITERIA LIST									
SUSPECTED CONTAMINATION					RESIDENT POPULATION				
	Y	N	U						
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>						
Surficial contamination can generally be assumed.					<input checked="" type="checkbox"/> Is any residence, school, or daycare facility on or within 200 feet of an area of suspected contamination? <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> Is any residence, school, or daycare facility located on adjacent land previously owned or leased by the site owner/operator? <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> Is there a migration route that might spread hazardous substances near residences, schools, or daycare facilities? <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Have onsite or adjacent residents or students reported adverse health effects, exclusive of apparent drinking water or air contamination problems? <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Does any neighboring property warrant sampling? <input type="checkbox"/> <input type="checkbox"/> Other criteria? _____				
					<input checked="" type="checkbox"/> RESIDENT POPULATION IDENTIFIED?				
Summarize the rationale for Resident Population (attach an additional page if necessary): <i>Residents seen on adjoining property during site visit</i>									

SOIL EXPOSURE PATHWAY SCORESHEET

Pathway Characteristics	
Do any people live on or within 200 ft of areas of suspected contamination? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Do any people attend school or daycare on or within 200 ft of areas of suspected contamination? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the facility active? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, estimate the number of workers: _____	

LIKELIHOOD OF EXPOSURE

1. SUSPECTED CONTAMINATION: Surficial contamination can generally be assumed, and a score of 550 assigned. Assign zero only if the absence of surficial contamination can be confidently demonstrated.

LE =

550

Suspected Contamination
Score

Reference

RESIDENT POPULATION THREAT TARGETS

2. RESIDENT POPULATION: Determine the number of people occupying residences or attending school or daycare on or within 200 feet of areas of suspected contamination (see Soil Exposure Pathway Criteria List, page 18).
 $6 \text{ people} \times 10 = 60$
3. RESIDENT INDIVIDUAL: If you have identified a resident population (factor 2), assign a score of 50; otherwise, assign a score of 0.
4. WORKERS: Use the following table to assign a score based on the total number of workers at the facility and nearby facilities with suspected contamination:

Number of Workers	Score
0	0
1 to 100	5
101 to 1,000	10
> 1,000	15

5. TERRESTRIAL SENSITIVE ENVIRONMENTS: Use PA Table 7 to assign a value for each terrestrial sensitive environment on an area of suspected contamination:

Terrestrial Sensitive Environment Type	Value
_____	_____
_____	_____

Sum =

15.0

6. RESOURCES

T =

115

WASTE CHARACTERISTICS

7. Assign the waste characteristics score calculated on page 4.

WC =

18

Score: 0, 5, or 10

RESIDENT POPULATION THREAT SCORE:

LE X T X WC
82.500.

13.8

Score: 0, 5, or 10

NEARBY POPULATION THREAT SCORE:

Score: 0, 5, or 10

14.8

SOIL EXPOSURE PATHWAY SCORE:
 Resident Population Threat + Nearby Population Threat

PA TABLE 7: SOIL EXPOSURE PATHWAY
TERRESTRIAL SENSITIVE ENVIRONMENT VALUES

Terrestrial Sensitive Environment	Assigned Value
Terrestrial critical habitat for Federally designated endangered or threatened species	100
National Park	
Designated Federal Wilderness Area	
National Monument	
Terrestrial habitat known to be used by Federally designated or proposed threatened or endangered species	75
National Preserve (terrestrial)	
National or State terrestrial Wildlife Refuge	
Federal land designated for protection of natural ecosystems	
Administratively proposed Federal Wilderness Area	
Terrestrial areas utilized by large or dense aggregations of animals (vertebrate species) for breeding	
Terrestrial habitat used by State designated endangered or threatened species	50
Terrestrial habitat used by species under review for Federal designated endangered or threatened status	
State lands designated for wildlife or game management	25
State designated Natural Areas	
Particular areas, relatively small in size, important to maintenance of unique biotic communities	

AIR PATHWAY CRITERIA LIST		
SUSPECTED RELEASE		PRIMARY TARGETS
Y	N	U
e	o	n
s	k	
<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Are odors currently reported?		
<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Has release of a hazardous substance to the air been directly observed?		
<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Are there reports of adverse health effects (e.g., headaches, nausea, dizziness) potentially resulting from migration of hazardous substances through the air?		
<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Does analytical or circumstantial evidence suggest a release to the air?		
<input type="checkbox"/> <input type="checkbox"/> Other criteria? _____		
<input type="checkbox"/> <input checked="" type="checkbox"/> SUSPECTED RELEASE?		
If you suspect a release to air, evaluate all populations and sensitive environments within 1/4 mile (including those onsite) as primary targets.		
Summarize the rationale for Suspected Release (attach an additional page if necessary): No odors/release noted during site visit		

AIR PATHWAY SCORESHEET

Pathway Characteristics	
Do you suspect a release (see Air Pathway Criteria List, page 21)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Distance to the nearest individual:	

LIKELIHOOD OF RELEASE

1. SUSPECTED RELEASE: If you suspect a release to air (see page 21), assign a score of 550. Use only column A for this pathway.
2. NO SUSPECTED RELEASE: If you do not suspect a release to air, assign a score of 500. Use only column B for this pathway.

A	B	Reference
Suspected Release	No Suspected Release	
	500	
LR =	500	

TARGETS

3. PRIMARY TARGET POPULATION: Determine the number of people subject to exposure from a suspected release of hazardous substances to the air.
_____ people \times 10 =
4. SECONDARY TARGET POPULATION: Determine the number of people not suspected to be exposed to a release to air, and assign the total population score using PA Table 8.
5. NEAREST INDIVIDUAL: If you have identified any Primary Target Population for the air pathway, assign a score of 50; otherwise, assign the Nearest Individual score from PA Table 8.
6. PRIMARY SENSITIVE ENVIRONMENTS: Sum the sensitive environment values (PA Table 8) and wetland acreage values (PA Table 9) for environments subject to exposure from a suspected release to the air.

Sensitive Environment Type	Value

Score =	
	5
Sum =	
	5
T =	36

WASTE CHARACTERISTICS

- A. If you have identified any Primary Target for the air pathway, assign the waste characteristics score calculated on page 4, or a score of 32, whichever is GREATER; do not evaluate part B of this factor.
- B. If you have NOT identified any Primary Target for the air pathway, assign the waste characteristics score calculated on page 4.

Waste Score	
Waste Score = 32	18
Waste Score = 32	18

AIR PATHWAY SCORE:

$$\frac{LR \times T \times WC}{82,500}$$

Score = 3.9

PA TABLE 8: VALUES FOR SECONDARY AIR TARGET POPULATIONS

Distance from Site	Nearest Individual/Chasee	Assessments Within Distance Category										Population Value
		1	11	37	501	201	1,001	3,001	10,001	30,001	100,001	
0	0	0	0	0	0	0	0	0	0	0	0	-
>0 to 1 mile	28	20	1	2	0	10	62	163	521	1,033	6,214	163,346
>1 to 2 miles	89	20	1	1	1	4	13	41	120	408	1,203	40,811
>2 to 3 miles	270	2	0	0	0	0	0	0	0	0	0	-
>3 to 4 miles	817	1	0	0	0	0	0	0	0	0	0	-
>1 to 2 miles	3186	0	0	0	0	0	0	0	0	0	0	-
>2 to 3 miles	7060	0	0	0	0	0	0	0	0	0	0	-
>3 to 4 miles												-

Nearest Individual = 20

Score = -

PA TABLE 10: DISTANCE WEIGHTS AND CALCULATIONS
FOR AIR PATHWAY SENSITIVE ENVIRONMENTS

Sensitive Environment	Assessment Type and Value		Assessment Type and Value
	PA Table 8	PA Table 9	
0	0.10	x	x
1 to 50 acres	0.035	x	x
Greater than 50 to 100 acres	0.0054	x	x
Greater than 100 to 150 acres			
Greater than 150 to 200 acres			
Greater than 200 to 300 acres			
Greater than 300 to 400 acres			
Greater than 400 to 500 acres			
Greater than 500 acres			

Wetland Area	Assigned Value
Less than 1 acre	0
1 to 50 acres	25
Greater than 50 to 100 acres	75
Greater than 100 to 150 acres	125
Greater than 150 to 200 acres	175
Greater than 200 to 300 acres	250
Greater than 300 to 400 acres	350
Greater than 400 to 500 acres	450
Greater than 500 acres	500

SITE SCORE CALCULATION

	S	S^2
GROUND WATER PATHWAY SCORE (S_{gw}):	4.7	22.1
SURFACE WATER PATHWAY SCORE (S_{sw}):	3.5	12.3
SOIL EXPOSURE PATHWAY SCORE (S_s):	14.8	219.0
AIR PATHWAY SCORE (S_a):	3.9	15.4
SITE SCORE:	$\sqrt{\frac{S_{gw}^2 + S_{sw}^2 + S_s^2 + S_a^2}{4}}$	16.4

SUMMARY

	YES	NO
1. Is there a high possibility of a threat to any nearby drinking water well(s) by migration of a hazardous substance in ground water?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
A. If yes, identify the well(s). _____ B. If yes, how many people are served by the threatened well(s)? _____		
2. Is there a high possibility of a threat to any of the following by hazardous substance migration in surface water?		
A. Drinking water intake B. Fishery C. Sensitive environment (wetland, critical habitat, others) D. If yes, identify the target(s). _____ _____	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
3. Is there a high possibility of an area of surficial contamination within 200 feet of any residence, school, or daycare facility?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If yes, identify the property(ies) and estimate the associated population(s). Lots # 50, 52, 74 ; total 6		
4. Are there public health concerns at this site that are not addressed by PA scoring considerations? If yes, explain:	<input type="checkbox"/>	<input checked="" type="checkbox"/>

FROST ASSOCIATES

P.O. Box 495, Essex, Connecticut 06426
(203) 767-1254 Fax (203) 767-7069

Feb 12, 1993

To: James Ussery
Department of Natural Resources
Environmental Protection Division
106 Butler Street SE
Atlanta, GA 30334

Fr: Bob Frost
Frost Associates
P.O. Box 495
Essex, CT 06426

Tel: (203) 767-1254
Fax: (203) 767-7069

Sub: Fairburn Road Dump Site
Douglas County, GA

Site Longitude: 84.634720
Site Latitude : 33.696110

The CENTRACTS report below identifies the population, households, and private water wells of each Block Group that lies within, or partially within, the .4, .3, .2, .1, .05, and .025, mile "rings" of the latitude and longitude coordinates above. CENTRACTS may have up to ten radii of any length. 1000 block groups, and 15000 block group sides.

CENTRACTS uses the 1990 Block Group population and Block Group house count data found in the Census Bureau's 1990 STF-1A files. The sources of water supply data are from the Bureau's 1990 STF-3A files. The boundary line coordinates of the Block Groups were extracted from the Census Bureau's 1990 TIGER/Line Files.

CENTRACTS reports are created with programs written by Frost Associates, P.O. Box 495, Essex, Conn. The code was written using Microsoft's Quick-Basic Ver. 4.5.

Latitude and Longitude coordinates identifying a site are entered in degrees and decimal degrees. One or more county files holding Block Group boundary lines are selected for use by CENTRACTS by determining whether the site coordinates fall within the minimum and maximum Lat\Lon coordinates of each county in the state.

Each Block Group line segment has Lat\Lon coordinates representing the "From" and "To" ends of that line. All coordinates from the selected county files are read and converted from degrees, decimal degrees to X\Y miles from the site location. Each line segment is then examined whether it lies within or partially within the maximum ring from the site.

The unique Block Group ID numbers of each line segment that lie within the maximum ring are retained. All Block Group boundary lines matching the Block Group numbers are then extracted from the respective county files to obtain all sides of the included Block Groups. Boundary records are then sorted in adjacent side order to determine the shape and area of each Block Group polygon.

A method to solve for the area of a polygon is to take one-half the sum of the products obtained by multiplying each X-coordinate by the difference between the adja

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cent Y-coordinates. For a polygon with coordinates at adjacent angles A, B, C, D, and E. The formula can be expressed:

$$\text{Area} = 1/2\{X_a(Y_e - Y_b) + X_b(Y_a - Y_b) + X_c(Y_b - Y_d) + X_d(Y_c - Y_e) + X_e(Y_d - Y_a)\}$$

For each ring, the selected Block Groups will be inside, outside, or intersected by the ring. When a polygon is intersected, the partial Block Group area within that ring is calculated using the method described below.

When a ring intersects a Block Group, the intersect points are solved and plotted at the points where the ring enters and exits the shape. The chord line, a line within the circle connecting the intersect points is determined. This chord line is used to calculate the segment area, the half moon shape between the chord line and the ring, and the sub-polygon created by the chord line and the Block Group boundaries that lie outside the ring.

The segment area is subtracted from the sub-polygon area to determine the area of the sub-polygon outside the ring. The area outside the ring is then subtracted from the area of the entire polygon to arrive at the inside area. This inside area is then divided by the tract's total area to determine the percentage of area within the ring. This process is repeated for each block group that is intersected by one of the rings. The total area, partial area, and percentage of partial area of those block groups within, or partially within a ring, are held in memory for the report.

On occasion, the algorithm described above is unable to determine the area of the partial area. Within the report program is a "Paint" routine which allows an enclosed shape to be highlighted. Another routine calculates the percentage of highlighted screen pixels to the pixels within the polygon. A manual entry is allowed. Both the "paint" method and manual entry method override the calculated method.

CENTRACTS lists, starting on page 4, all Block Groups in State, County, Census Tract, and Block Group ID order that lie within, or partially within, the maximum ring. Each Block Group is identified by a City or Town name and by the Block Group's State, County, Tract and Block Group ID number. Following is the Block Group's 1990 population and house count extracted from the Census Bureau's 1990 STF-1A files.

The next four columns display water source data from the 1990 STF-3A files. The first column is "Units with Public system or private company source of water", followed by "Units with individual well, Drilled, source of water"; "Units with individual well, Dug, source of water" and "Units with Other source of water".

For each ring, CENTRACTS then shows the Block Groups that are within that ring, the Block Group's total area in square miles, the partial area of the Block Group within that ring, and the partial percentage within the ring. The areas of the included Block Group and the partial areas are then totaled.

The last section tallies the demographic data within each ring. The percentage of area for each Block Group is multiplied times the census data for that Block Group and totaled for all Block Group's within the ring. Ring totals are then determined by subtracting the three mile data from the four mile, the two mile from the three mile, one from the two, etc... Population on private wells is calculated using the formula: $((\text{Drilled} + \text{Dug Wells}) / \text{Households}) * \text{Population}$

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No.	City	Block Group ID	Blk Grp People	House Holds	Public Water	Drilled Wells	Dug Wells	Other
1	Lithia	13097 0802 5	3831	1341	1274	16	15	0
2	Lithia	13097 0801985	125	65	26	18	5	12
3	Lithia	13097 0801986	130	46	0	39	6	0
4	Bill Arp	13097 0805043	4188	1417	1277	88	4	6
5	Bill Arp	13097 0805044	2021	685	568	140	19	0
6	Lithia	13097 0806011	1260	434	394	16	0	0
7	Lithia	13097 0806012	2817	942	894	26	0	0
8	Lithia	13097 0806014	299	113	57	29	35	0
9	Lithia	13097 0806015	313	109	55	49	0	0
10	Lithia	13097 0806016	981	312	304	0	0	0
11	Lithia	13097 0806021	184	64	41	6	13	0
12	Lithia	13097 0806022	2248	809	789	55	0	0
13	Lithia	13097 0806023	311	124	125	0	14	0
14	Lithia	13097 0806024	141	53	38	17	0	0
15	Atlanta	13121 0103016	1439	549	435	80	8	0
16	Atlanta	13121 0103017	429	216	163	49	15	8
17	Atlanta	13121 0103018	1168	406	139	194	72	7
18	Atlanta	13121 0103021	2902	906	880	30	7	0
19	Atlanta	13121 0103022	2296	791	811	7	6	0
20	Atlanta	13121 0103023	48	27	37	0	0	0
21	Atlanta	13121 0103024	1091	385	309	47	0	0
22	Atlanta	13121 0103025	2616	944	824	66	34	0
Totals:			30838	10738	9440	972	253	33

Fairburn Road Dump Site
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City	Census Tract ID	Tract People	House Count	Public Water	Drilled Wells	Dug Wells	Other Wells
Atlanta	13121 0103018	1168	406	139	194	72	7
Atlanta	13121 0103021	2902	906	880	30	7	0
Atlanta	13121 0103022	2296	791	811	7	6	0
Atlanta	13121 0103016	1439	549	435	80	8	0
Atlanta	13121 0103017	429	216	163	49	15	8
Atlanta	13121 0103025	2616	944	824	66	34	0
Atlanta	13121 0103023	48	27	37	0	0	0
Atlanta	13121 0103024	1091	385	309	47	0	0
Sub Totals:		11989	4224	3598	473	142	15
Bill Arp	13097 0805044	2021	685	568	140	19	0
Bill Arp	13097 0805043	4188	1417	1277	88	4	6
Sub Totals:		6209	2102	1845	228	23	6
Lithia	13097 0801986	130	46	0	39	6	0
Lithia	13097 0806022	2248	809	789	55	0	0
Lithia	13097 0801985	125	65	26	18	5	12
Lithia	13097 0806024	141	53	38	17	0	0
Lithia	13097 0806023	311	124	125	0	14	0
Lithia	13097 0802 5	3831	1341	1274	16	15	0
Lithia	13097 0806011	1260	434	394	16	0	0
Lithia	13097 0806012	2817	942	894	26	0	0
Lithia	13097 0806014	299	113	57	29	35	0
Lithia	13097 0806015	313	109	55	49	0	0
Lithia	13097 0806016	981	312	304	0	0	0
Lithia	13097 0806021	184	64	41	6	13	0
Sub Totals:		12640	4412	3997	271	88	12

Fairburn Road Dump Site
Douglas County, GA

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For Radius of 4 Mi., Circle Area = 50.265482

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
1	Lithia	13097 8025	3.350849	0.371207	11.08
2	Lithia	13097 801985	2.807955	1.034684	36.85
3	Lithia	13097 801986	2.713740	2.503446	92.25
4	Bill Arp	13097 805043	17.312460	0.302592	1.75
5	Bill Arp	13097 805044	6.344971	3.097028	48.81
6	Lithia	13097 806011	2.928118	0.096424	3.29
7	Lithia	13097 806012	3.149606	2.446624	77.68
8	Lithia	13097 806014	3.266172	3.266172	100.00
9	Lithia	13097 806015	2.608335	2.608335	100.00
10	Lithia	13097 806016	1.418345	1.398451	98.60
11	Lithia	13097 806021	4.956570	4.934366	99.55
12	Lithia	13097 806022	2.018689	1.763781	87.37
13	Lithia	13097 806023	0.894397	0.894397	100.00
14	Atlanta	13121 103025	9.253641	0.446809	4.83
15	Atlanta	13121 103016	6.009391	3.277205	54.53
16	Atlanta	13121 103017	9.028063	8.506675	94.22
17	Atlanta	13121 103018	17.330915	0.864307	4.99
18	Atlanta	13121 103021	3.142375	0.166839	5.31
19	Atlanta	13121 103022	6.381183	3.169111	49.66
20	Atlanta	13121 103023	3.939585	3.072137	77.98
21	Atlanta	13121 103024	6.105549	3.847553	63.02
22	Lithia	13097 806024	1.656744	1.656744	100.00
Totals:			116.617653	49.724895	

For Radius of 3 Mi., Circle Area = 28.274334

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
2	Lithia	13097 801985	2.807955	0.418746	14.91
3	Lithia	13097 801986	2.713740	1.126495	41.51
5	Bill Arp	13097 805044	6.344971	0.292917	4.62
7	Lithia	13097 806012	3.149606	1.124686	35.71
8	Lithia	13097 806014	3.266172	2.965096	90.78
9	Lithia	13097 806015	2.608335	2.464743	94.49
10	Lithia	13097 806016	1.418345	0.406699	28.67
11	Lithia	13097 806021	4.956570	4.042350	81.56
12	Lithia	13097 806022	2.018689	0.243076	12.04
13	Lithia	13097 806023	0.894397	0.894397	100.00
15	Atlanta	13121 103016	6.009391	1.935354	32.21
16	Atlanta	13121 103017	9.028063	5.732634	63.50
19	Atlanta	13121 103022	6.381183	1.506055	23.60
20	Atlanta	13121 103023	3.939585	2.268647	57.59
21	Atlanta	13121 103024	6.105549	1.075409	17.61
22	Lithia	13097 806024	1.656744	1.656744	100.00
Totals:			63.299297	28.154049	

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For Radius of 2 Mi., Circle Area = 12.566371

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
2	Lithia	13097 801985	2.807955	0.007357	0.26
3	Lithia	13097 801986	2.713740	0.030164	1.11
8	Lithia	13097 806014	3.266172	0.685334	20.98
9	Lithia	13097 806015	2.608335	1.948867	74.72
11	Lithia	13097 806021	4.956570	2.110399	42.58
13	Lithia	13097 806023	0.894397	0.894397	100.00
15	Atlanta	13121 103016	6.009391	0.479085	7.97
16	Atlanta	13121 103017	9.028063	4.086775	45.27
19	Atlanta	13121 103022	6.381183	0.370418	5.80
20	Atlanta	13121 103023	3.939585	1.256963	31.91
22	Lithia	13097 806024	1.656744	0.696610	42.05
Totals:			44.262138	12.566371	

For Radius of 1 Mi., Circle Area = 3.141593

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
2	Lithia	13097 806015	2.608335	0.589044	22.58
13	Lithia	13097 806023	0.894397	0.557970	62.38
16	Atlanta	13121 103017	9.028063	0.692739	7.67
20	Atlanta	13121 103023	3.939585	0.288844	7.33
22	Lithia	13097 806024	1.656744	1.012997	61.14
Totals:			18.127125	3.141593	

For Radius of .5 Mi., Circle Area = 0.785398

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
9	Lithia	13097 806015	2.608335	0.151228	5.80
13	Lithia	13097 806023	0.894397	0.185398	20.73
16	Atlanta	13121 103017	9.028063	0.041731	0.46
20	Atlanta	13121 103023	3.939585	0.027897	0.71
22	Lithia	13097 806024	1.656744	0.379144	22.88
Totals:			18.127125	0.785398	

Fairburn Road Dump Site
Douglas County, GA

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For Radius of .25 Mi., Circle Area = 0.196350

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
9	Lithia	13097 806015	2.608335	0.005326	0.20
13	Lithia	13097 806023	0.894397	0.042923	4.80
22	Lithia	13097 806024	1.656744	0.148100	8.94
Totals:			5.159477	0.196350	

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===== Site Data =====

Population:	11451.19
Households:	4070.65
Drilled Wells:	421.36
Dug Wells:	107.41
Other Wells:	12.41

===== Partial (RING) data =====

---- Within Ring: 4 Mile(s) and 3 Mile(s) ----

Population:	7060.58
Households:	2468.19
Drilled Wells:	218.78
Dug Wells:	33.40
Other Wells:	5.54

** Population On Private Wells: 721.39

---- Within Ring: 3 Mile(s) and 2 Mile(s) ----

Population:	3186.10
Households:	1127.01
Drilled Wells:	120.73
Dug Wells:	39.27
Other Wells:	3.22

** Population On Private Wells: 452.33

---- Within Ring: 2 Mile(s) and 1 Mile(s) ----

Population:	817.16
Households:	322.51
Drilled Wells:	56.62
Dug Wells:	24.85
Other Wells:	3.04

** Population On Private Wells: 206.44

---- Within Ring: 1 Mile(s) and .5 Mile(s) ----

Population:	270.15
Households:	107.59
Drilled Wells:	18.26
Dug Wells:	6.91
Other Wells:	0.58

** Population On Private Wells: 63.21

Fairburn Road Dump Site
Douglas County, GA

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---- Within Ring: .5 Mile(s) and .25 Mile(s) ----

Population:	89.04
Households:	34.43
Drilled Wells:	5.34
Dug Wells:	2.30
Other Wells:	0.04

** Population On Private Wells: 19.75

---- Within Ring: .25 Mile(s) and 0 Mile(s) ----

Population:	28.17
Households:	10.91
Drilled Wells:	1.62
Dug Wells:	0.67
Other Wells:	0.00

** Population On Private Wells: 5.92

** Total Population On Private Wells: 1469.04



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL PHOTOGRAPHIC INTERPRETATION CENTER
VINT HILL FARMS STATION
BUILDING 166, BICHER ROAD
WARRENTON, VIRGINIA 22186-5129

November 20, 1991

MEMORANDUM

SUBJECT: Transmittal of Final Report, TS-PIC-91121,
Fairburn Road Dump, Douglas County, Georgia

FROM: Gordon E. Howard, Jr. *Gordon E. Howard, Jr.*
Environmental Scientist
Environmental Photographic Interpretation Center
Advanced Monitoring Systems Division

TO: Rebecca B. Kemp
Remote Sensing Coordinator
Information Services Staff
Region 4

Attached are three copies of the final report for the subject site. The analysis covered the time period 1968 through 1990. The following dates of photography are included for this effort:

December 6, 1968
February 27, 1970
March 29, 1978
March 19, 1985
April 8, 1990

A critique sheet is attached, which we request you fill out and return in the self-addressed envelope. If we can be of any additional help, please contact me at FTS 557-3110 or 703-349-8970. The Regional Project Manager for this site is John McKeown.

Attachments (4)

cc: (w/o attachment)
J. Montanari, ORD, Reg. 4
J. McKeown, Reg. 4

by
Festus T. Olayinka
The Bionetics Corporation
Warrenton, Virginia 22186

Contract No. 68-03-3532

Project Officer
Gordon E. Howard, Jr.
Environmental Photographic Interpretation Center
Environmental Monitoring Systems Laboratory
Warrenton, Virginia 22186, FTS 557-3110

ENVIRONMENTAL MONITORING SYSTEMS LABORATORY
OFFICE OF RESEARCH AND DEVELOPMENT
U.S. ENVIRONMENTAL PROTECTION AGENCY
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NOTICE

This document has undergone a technical and quality control/assurance review and approval by personnel of the EPA/ORD Environmental Monitoring Systems Laboratory at Las Vegas (EMSL-LV), and is for internal Agency use and distribution only.

waste disposal, witnessed by the neighboring residents, has occurred along the west bank of the Chattahoochee River. Some of the wastes at this dump may have come from the Young Refinery in the vicinity.

Findings include mounded materials, some of which may be spoils from extracted, mined and/or dredged-out materials; ground scarring, which may indicate past burial and/or ground disturbance; probable and possible fill areas; and possible refuse. Excavations, possible trenches and vegetation clearing are also noted.

Evidence of waste disposal is not seen in this analysis; however, the aforementioned findings may not be unrelated to the probable extraction, mining and/or dredging operations noted in the eastern portion of the site.

The EPA's Environmental Photographic Interpretation Center in Warrenton, Virginia, a branch of the Advanced Monitoring Systems Division of the Environmental Monitoring Systems Laboratory in Las Vegas, Nevada, performed this analysis at the request of the Superfund Support Section of EPA Region 4 in Atlanta, Georgia, and the Office of Emergency and Remedial Response in Washington, D.C. This analysis covers the period between 1968 and 1990, and the report was completed in November 1991.

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UNSCANNABLE

MEDIA

(PHOTOGRAPHS)

Pre-remedial efforts. This analysis also focuses on the location of the dump and associated features such as drums, refuse, etc.

Figure 1 shows the site location, keyed to a photocopy of two U.S. Geological Survey (USGS) 1:24,000-scale topographic maps. Site boundaries or areas used in this analysis were determined from observations made from the aerial photography in conjunction with collateral data supplied by EPA Region 4 and do not necessarily denote legal property lines or ownership.

Aerial photography of the Fairburn Road Dump was obtained to represent the period from 1968 to 1990.² Black and white photography from 1968, 1970, 1974, 1978, 1985, and 1990; and color infrared photography from 1981 and 1988 were used for this analysis. Photography from 1974 was similar to that of 1970; thus, the former was analyzed but not reproduced for this report. Photography from 1981 was analyzed but not reproduced for this report due to its small scale and poor resolution, while that from 1988 was also analyzed but not reproduced because it did not differ significantly from the 1990 photography. Any significant features noted in those years will be annotated and discussed in the following year of photography reproduced in this report.

The alleged waste disposal, witnessed by the neighboring residents, occurred along the west bank of the Chattahoochee

¹Collateral information supplied by EPA Region 4.
Hereafter, an asterisk (*) denotes collateral information obtained from EPA Region 4.

²A complete listing of maps and photography used in this report is provided in the References section.

vegetation are also noted.

Activities and findings observed within the site, especially along the eastern portion, do not appear to be disposal or dumping of wastes. Rather, they appear to be related to probable extraction, mining and/or possible dredging activities along the Chattahoochee River. Furthermore, these findings may not be exclusively extraction- or dredging-related; any other inherent operations in this area are not discernible from this analysis.

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with viewing at various magnifications, enables the analyst to identify signatures associated with different features and environmental conditions. The term "signature" refers to a combination of visible characteristics (such as color, tone, shadow, texture, size, shape, pattern, and association) which permit a specific object or condition to be recognized on aerial photography.

Photographic prints were made from those years of aerial photographic coverage that reveal significant information about the site. The analyst's findings are annotated on overlays to prints and/or base maps and described in the accompanying text. Site boundaries or areas used in this analysis were determined from observations made from the aerial photography in conjunction with collateral data supplied by EPA Region 4 and do not necessarily denote legal property lines or ownership.

Due to factors inherent in the photographic printing process, prints do not exhibit the level of detail that is visible in the original aerial photography. Therefore, some features identified from the aerial photography may not be clearly discernible, or even visible, on the photographic prints presented in this report.

The terms "possible" and "probable" are used to indicate the degree of certainty of signature identification. "Possible" is used when only a few characteristics are discernible or these characteristics are not unique to a signature. "Probable" is used when incrementally more characteristics are discernible. No qualifying terms are used when the characteristics of a signature allow for a definite feature identification.

WEST BANK OF THE CHATTAHOOCHEE RIVER. THE MOUNTED MATERIALS, which may be spoils from extracted and/or dredged-out materials, appear light-toned, while the vertical objects exhibit different shapes. A crane-like object (not annotated) is seen between the mounded materials and the river. Trailer-like objects and vehicles (neither annotated) are also visible in this area. This particular portion of the site is on the eastern slope of a hillock (not annotated) and was supposedly subjected to dumping activities.* Barges and other flotation objects (neither annotated), which may be related to the probable extraction and/or possible dredging operations, are observed on the Chattahoochee River, adjacent to the area of mounded materials.

The activity in the southeastern portion of the site appears similar to that described for the east central portion. An excavation (EX), linear mounded material, and vertical objects are visible in this area. The non-wooded, probably cleared area (not annotated) to the west and northwest of the excavation remains visible throughout the rest of this analysis and will not be discussed.

The suspected and channelized drainage paths within and outside the site lead generally east toward the Chattahoochee River; however, the directions of surface runoff from the site are similar to slope orientation of the near-symmetrical hillock in the center of the site. The channelized drainage along the western boundary of the site flows south toward Fairburn Road.

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(PHOTOGRAPHS)

March 29, 1978	ASCS ⁴	13097	178:62,63	1:40,000	35830:103,104
February 24, 1981	USGS	NHAP80	363:160-162	1:58,000	35949-35951
March 19, 1985	GAS ⁵	---	13:522,523	1:31,200	35941,35942
February 7, 1988	USGS	NAPP	721:118-120	1:40,000	35952-35954
April 8, 1990	GAS	---	4032,4033	1:31,200	35943,35944

MAPS

<u>Source</u>	<u>Name</u>	<u>Scale</u>	<u>Date</u>
USGS	Campbellton, GA	1:24,000	1982
USGS	Ben Hill, GA	1:24,000	1982

¹U.S. Geological Survey, U.S. Department of the Interior

²Williams Photographic, Inc., Ballground, Georgia

³Georgia Department of Transportation, Atlanta, Georgia

⁴Agricultural Stabilization and Conservation Service, U.S. Department of Agriculture

⁵Georgia Aerial Surveys, Inc., Smyrna, Georgia

LAT - 33° 41' 49"
Long - 84° 38' 00'

VIEW EVENT COMMENTS
REF NO.: 05680
OPUNIT: 00
EVENT: DS1
COMM LINE

EVENT COMMENTS
EPA ID: GAD984295196
SITE NAME: FAIRBURN ROAD-CHATTahoo
EVENT NAME: DISCOVERY

ID	NO.	COMMENTS	TYPE
001	01	SITE IS LOCATED ALONG THE NORTH SIDE OF FAIRBURN ROAD IN	
001	02	DOUGLAS COUNTY. THE SITE IS AN ALLEGED DUMPSITE ALONG THE	
001	03	WESTERN BANK OF THE CHATTAHOOTCHIE RIVER ON THE NORTH SIDE	
001	04	OF FAIRBURN ROAD DIRECTLY ACROSS THE FULTON COUNTY LINE.	
001	05	MS ELIZABETH TEAL OF DOUGLASSVILLE GEORGIA CLAIMS TO HAVE	
001	06	WITNESSED DUMPING BY MR BARTLETT HULSEY, ALSO OF	
001	07	DOUGLASSVILLE. THIS CLAIM IS SUBSTANTIATED BY SIMILIAR	
001	08	CLAIMS BY OTHER COUNTY RESIDENTS INCLUDING MS PAMELA	
001	09	BLOCKEY O'BRIEN. IT IS BELIEVED THAT AT LEAST SOME OF THE	
001	10	WASTE ORIGINATED FROM YOUNG REFINERY IN DOUGLASSVILLE. J	
001	11	MCKEOWN 6/21/91	

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VIEW EVENT COMMENTS
REF NO.: 05680
OPUNIT: 00
EVENT: DS1
COMM LINE

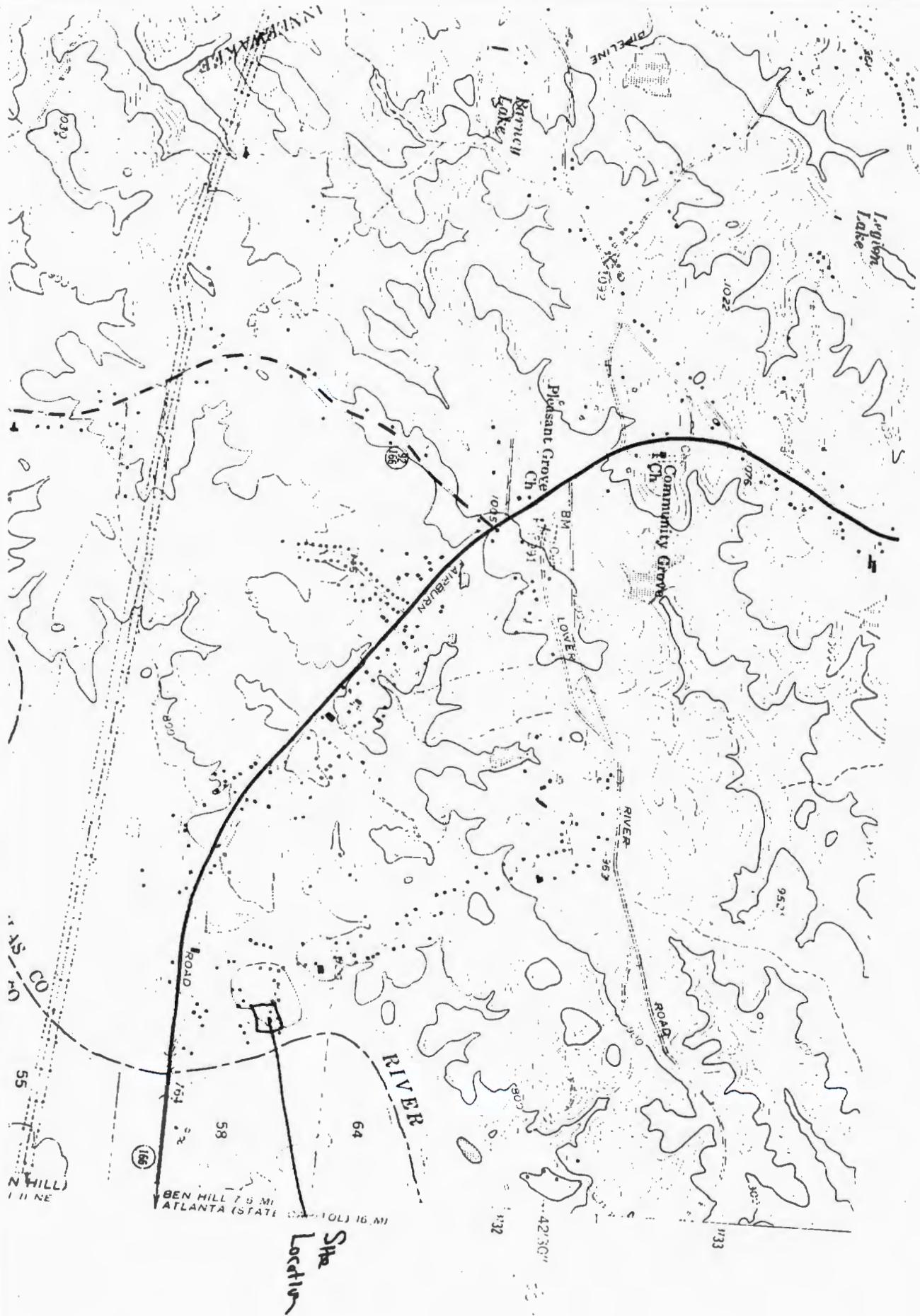
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VIEW EVENT COMMENTS
REF NO.: 05680
OPUNIT: 00
EVENT: DS1
COMM LINE

EVENT COMMENTS
EPA ID:
SITE NAME: FAIRBURN ROAD-CHATTahoo
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She
Location

VIEW SITE SUMMARY SCREEN 1 OF 2

REF NO.: 05680 EPA ID: GAD984295196

IFMS ID NO.: 04

NAME: FAIRBURN ROAD-CHATTAHOOTCHIE DUMP

STREET: FAIRBURN ROAD

CITY: DOUGLASSVILLE

STATE: GA

COUNTY NAME: DOUGLAS

CONGRESS DISTRICT: 06

OWNER INDICATOR: UN

LATITUDE: 33 41 49.0

LAT/LONG SOURCE: R

USGS HYDRO UNIT: 03130002

NPL STATUS INDIC: N

CATEGORY:

FED FACILITY DOCKET: F

FED AGENCY PRP: N

S/I DIOXIN TIER:

ZIP CODE: 30135-

COUNTY CODE: 097

FED FACILITY INDIC: N

RCRA FLAG:

LONGITUDE: 084 38 00.0

INCIDENT TYPE:

METROSTAT AREA: 0520

COST RECOVERY INDIC: E

SITE CLASSIFICATION: ND

STATE PRP: N

MUNICIPAL PRP: N

PROPOSED NPL UPDATE NO.: 00 FINAL NPL UPDATE NO.: 00

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